University of Southern Queensland

Faculty of Engineering and Surveying

MODERNISATION OF AN EXISTING IRRIGATION AREA

A dissertation submitted by

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ABSTRACT

Generally this project is to examine the operational data of SunWater's Burdekin Haughton Water Supply Scheme in relation to identifying areas for future modernisation enhancements.

This particular scheme comprises of 15 pump stations delivering approximately 300,000 ML/yr of water through 320km of channels and 67 km of pipelines, some of which are now nearly 60 years old.

As water is becoming a valuable resource. Available supplies are under more pressure due to drought and demand. Increasing supply options are limited so the efficiency of existing systems is being targeted as a way of maximizing available supply.

In Victoria, considerable resources are being put into identifying the delivery losses associated with existing irrigation systems with the view to improve system efficiencies. Many of these savings are able to be captured as part of the future refurbishment of an irrigation system.

By developing a 'Water Balance' model of the system, we can identify the amounts of water going in and out of the irrigation area and this will allow us to deduce efficiency in the system. By doing this we will also calculate our delivery loss, this figure has to be accounted for and can be the result of a number of different mechanisms.

The results of the 'Water Balance' model will show us the areas where these losses are and where we should be concentrating our efforts to minimize them. At these locations we can then use available modern technology such as accurate flow meters to monitor our distribution, and therefore improves our accuracy of data.

With the locations that have been highlighted as areas of interest from the Water Balance model, we can use this information to focus our annual maintenance and renewal program on these locations. This gives the Scheme's renewals projects added value as it also enhances the efficiencies of our overall system.

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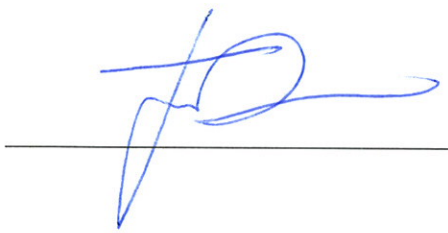

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ABBREVIATIONS

EM	Electromagnetic
BHWSS	Burdekin Haughton Water Supply Scheme
GMW	Goulburn Murray Water
GMID	Goulburn Murray Irrigation District
ANCID	Australian National Committee of Irrigation and Drains
ML	Megalitres
GUI	Graphical User Interface
SCADA	System Control and Data Acquisition
DFL	Design Flow Level
HDPE	High Density Polyethylene
ATS	Australian Technical Specification
GIS	Graphical Information System
CG	Central Goulbourn

1.0 INTRODUCTION

1.1 OUTLINE OF THE STUDY

This research project was invoked to ascertain the potential program of works a water supply organisation may use in the process of 'Modernising' their Water Supply Scheme. In the event of an existing irrigation area attaining funds to revamp their scheme, where and how would they look to improve their scheme with the best cost benefit to the shareholders. This study looks at how the manager of a scheme can identify areas in the irrigation systems that can be improved to provide operational costs reduction and improved delivery efficiency.

1.2 INTRODUCTION

As water is becoming an increasingly valuable resource in Australia, available supplies are already under pressure due to drought and demand. Options to increase supply are limited so targeting the efficiency of existing systems is an appropriate way of improving the available supply.

In Victoria, considerable resources are being put into identifying the losses associated with existing irrigation systems with the view to improve system efficiencies. This is driven largely due to the need to source allocation for environmental flow targets.

Many of these savings are able to be captured as part of the future refurbishment of an irrigation system however the economic evaluation of options is heavily dependent on the understanding of the magnitude and mechanism of the various losses from a supply system.

The refurbishment of SunWater's ageing infrastructure is currently based on condition assessments and an annuity funded renewals program. The costs associated with refurbishment options have been based on capital costs with less consideration given to the financial benefit of implementing water savings initiatives.

This project targets the identification of loss mechanisms within irrigation supply system and also identifies potential water savings initiatives, which will improve system efficiencies and maximise the effectiveness of available water resources

1.3 THE PROBLEM

This irrigation scheme has been in operation since the early 1950's, as it was started as part of the returned servicemen settlement scheme. Areas of land along the Left Bank of the Burdekin River were sub-divided in the sections now known as Clare, Millaroo and Dalbeg. These farmers that went on to settle these areas grew tobacco as their predominant crop and the area was suited for this and the channel system was run in a roster system. These farms in these areas were approximately 20Ha in size.

In the mid to late 1980's, after the Burdekin Dam had been completed, the Queensland Government developed a further 30,000Ha in the left bank and a further 2,500Ha on the right bank into the section now known as Barratta, Haughton, Selkirk, Jardine, Mulgrave and with Leichhardt on the Right Bank.

The original areas of Clare, Millaroo and Dalbeg are the most labour intensive sections of the BHWSS, these sections incorporate the manual drop boards for the water level control along the open main delivery channels. All these old areas are served through a main channel that is supplied water from the river through either 1 or 2 pump stations along the length of the sections. The main channels in these sections are approximately only 1.2m wide at the bed of the channel and in most case only 1.5m deep. Average capacity of the channels is around 150ML/day. This is in comparison to the main channels of the newer areas which can delivery up to 2,600ML/day.

These old systems are manually operated and therefore require a considerable labour component compared to the newer areas developed in the 1990's.

It therefore makes most sense to target these areas for the future modernisation of the scheme. Previous refurbishment works done by SunWater in the Clare section, have replaced 9 out of 10 laterals channels with pipelines and have provided excellent operational and maintenance

savings. This can be seen later in Chapter 5, with the efficiencies for Clare in comparison to the other older areas.

As stated above, if a delivery scheme was given an open cheque book with the focus on making their existing scheme more efficient and fix known operational problems within the scheme, where would they start?

New pumps, covers for the open channels, replacing the old open channels with pipelines, automated open channel regulating gates are all possible options for modernisation. But realistically the funding for the refurbishments will be limited. So selecting the projects that will be the best cost benefit for the scheme will need to be selected to make the most efficient use of the expenditure.

To do this we need to look at the data and find where the water is being delivered and where it is going. This is where the water balance is critical to the efficiency of the scheme. From this simple equation it is easy to find the areas in the scheme that are operating efficiently. However to do this, the infrastructure needs to be in place in the scheme to accurately measure the flows.

This is the first problem within this scheme. Over the entire scheme, there is currently very few lateral offtakes off the main distributors that are metered, which the majority are pipelines. Therefore the main delivery open channels that are susceptible to the majority of losses, would targeted as first port of call to deliver some efficiency gains. However with the lack of information at these points, the flows throughs these parts of the system can only really be derived from the meter offtake data through that part of the system.

Although in some of these points of the delivery, we can interrogate the existing SCADA system where the offtakes are controlled by a automatic control gate. These can be in either under or over shot configuration. Using the inbuilt hardware control, the gate does show some flow data. However this is calculated from water levels up and downstream of the gate, using the rating curve of the gate, these flows are displayed by the GUI of the SCADA control system. This data is not easily accessible and due to the accuracy, the data is not able to be used in the accounting records of chargeable water.

With this information missing, the water balance which is to be used to find the efficiencies of the section is not as accurate as it could be. But by using the information that is available and previous studies and local knowledge of the delivery losses in the system, efficiencies can be estimated with some degree of accuracy.

1.4 RESEARCH OBJECTIVES

The title of this project is ‘Modernisation of an Existing Irrigation Area’, which is quite a broad statement for the area involved. (See Figure 2.1 for a overview map of the area involved). To achieve this overall objective, a number of tasks have to be completed during the process.

Generally this project is to analyse the operational data of the water distribution system and determine where changes could be made in order to change to operate it in a more efficient manner. So this project is hoped to become the framework to the future Modernisation of the Burdekin Haughton Water Supply Scheme projects.

To do this we have to develop a ‘Water Balance’ of the distribution system. This will allow us to identify the amounts of water going in and out of the irrigation area and allow us to deduce efficiency in the area.

In a perfect distribution system the efficiencies should be 100%. But due to losses associated with the delivery of the water this will never occur in the Burdekin Haughton Water Supply Scheme (BHWSS). This is due to a lot of different losses ranging from metering inaccuracies to poor operational controls. These losses will be looked at in more detail in Chapter 3 of this report.

2.0 BACKGROUND

2.1 INTRODUCTION

This project is based on the experience gained over the last 20 years of operation in the Burdekin Haughton Water Supply Scheme (BHWSS). The lessons learnt during the development of the scheme and the subsequent operational requirements will be used to fine tune the modernisation options. This chapter gives the background to what makes up the BHWSS and how it is currently operated.

2.2 BURDEKIN HAUGHTON WATER SUPPLY SCHEME

2.2.1 General

The BHWSS as with any scheme that has been operating for nearly 60 years, the technology available for irrigation distribution has changed dramatically over that time. This in itself is a problem for trying to modernise that system as depending on when it was constructed.

The scheme has broken up into sub sections for ease of identification, normally these section were also the extent of works for each expansion development. The section information is as follows in Table 2.1.

Section	PE Channel	Earth Channel	Concrete Channel	Pipeline	Meter Outlets
	Length (m)				
Clare	1604	4764	15241	29623	259
Milllaroo		21134	20649	7914	181
Dalbeg		5812	12789	9500	104
Barratta		105479		8244	221
Haughton		106962	1674	9160	148

Table 2.1 Summary of BHWSS Sections

The BHWSS is backed by the capacity of the Burdekin Falls Dam located some 150km upstream of the irrigation area. The dam holds approximately 1,860,000ML and up to recent times, been

filled to capacity nearly every year for the last 10 years. The dam was constructed for the expansion of the scheme in the mid 1980's.

The Burdekin River is used to transport the water down the river to the Water Supply Scheme's pump stations located along the river.

Figure 2.1 Overall Plan of the Burdekin Haughton Water Supply Scheme

2.2.2 Pump Stations

The BHWSS has 11 separate pump stations that pump water directly from the Burdekin River. These are

- Dalbeg A and B
- Millaroo A and B
- Clare A and B
- Elliot 1 and 2
- Tom Fenwick Pump Stations 1, 2, 3, 4 and 5

These pump station stations all pump from the river through rising mains into channel, which are called the Main Channels of each sub section. As these were constructed at various times, the technology to meter the pumped flow through the rising mains is varied. The types of flow meters used are, pressure differential such as orifice plate and venturi, doppler, ultrasonic and propeller actuated types. The older type flow meters have been proven to be unreliable and a program to replace them is underway.

2.2.3 Channels

After the water is pumped through the rising mains, the main channels take the water and deliver it to the outlying sub areas. To serve these outlying areas some of the main channels are up to approximately 60km long, for instance Barratta and Haughton Main Channels are 36.3.km and 55.7km respectively.

From the main channels, smaller lateral channels distribute the water to the farms. Meter outlet offtakes normally come off these smaller laterals. In the newer areas of Haughton and Barratta, the laterals are just as big as the main channels in the smaller areas. This is because the area of farms served in these areas is nearly 10 times the sizes of the older area farms. Therefore the scheme can deliver the water.

Refer Table 2.1 for Channel lengths in each section.

2.3 CHANNEL AND OPERATIONAL TYPES

As stated above, some of the sections were built in different eras of available technology. This is one of the modernisation project biggest hurdles as what fits for one section may not fit for there other, depending on their type of channel and operation.

The older section channels of Clare, Millaroo and Dalbeg, were constructed smaller than the other areas due to the size of the farms served and the water demand for the original crop type of tobacco and rice for which the scheme was designed. Since the fairly recent move into different crops, mainly the water heavy demand sugar cane, these channels are now run over their design delivery capacity.

Figure 2.2 Typical Old Section Open Channel

These older section were constructed as mainly concrete lined open channel, but due to the age of the channels, this lining is now in need of on going repair. As they were originally constructed to be essentially water tight, the subsoil was not prepared to hold water. Therefore now as the lining fails, seepage through the lining is now becoming a significant loss for these areas. This will be discussed further in Chapter 4 – Losses.

Also in the older section, the operational type of channel available at the time, was the check and drop type arrangement on open channel. This requires a dropboards, either 1.2 (4’) or 1.8m (6’) in length to be placed in the check structures at the end of each bay of channel to regulate the flow to meet the farmer demand down stream.

As the crop has changed to sugar cane, to try and run these smaller capacity channels to keep up to demand, has led to some problem of supplying the demand. These problems are highlighted as soon as a large user stops irrigating suddenly and the supply is not regulated by the Water Officer instantly, as they normally only do a channel runs 2 a day. This water will either over top the channel or find its way to an overflow depending on the setup of the bays. This overflow loss is one of the biggest losses through the older type sections. This will also be covered in more details in Chapter 4 – Losses – Overflows.

This manual system is labour intensive and has inherent safety risks involved in just operating the channels. This it self has to be looked at as a concern for the modern day irrigation scheme.

The newer sections of Leichhardt, Mulgrave, Haughton and Barratta don't have these same problems of the small manual channels, but do have their own operational issues that have to be dealt with in everyday operation. These sections deliver water too much bigger areas and therefore the loss mechanism that are considered not influential in the smaller areas raise their heads in these larger areas, as these losses could be more than even delivered in total to the smaller areas.

These sections even though they are the 'newer' areas still differ in control technology. The Haughton system for example uses SCADA controlled overshot gates. These can be set and controlled via the GUI by the operator. This system is ideal for efficiency as the movement of water can be monitored instantaneously via the water level recorders. This system allows the design of the system to be non-reliant on overflows as a back up.

In the Barratta system, the flow is controlled by down stream float regulators. This system then uses the Design Flow Level (DFL) of the channel to monitor the flow. This type of control is good also but still prone to overflows due to demand changes. Water level indicators are connected to the SCADA and let the operator know the current operational state of the channel.

Figure 2.3 Barratta Main Channel Float Regulator

The Barratta Main Channel has 30 regulation points down the length of the channel. All of these are float regulators, in two type of structures, one an inline regulation and the other a regulator on the outlets of a siphon.

With this type of regulator installed, as it cannot be remotely controlled like the Haughton gates, there is still need for the overflows. These are still a major source of loss in this system, but the . This will be examined further Chapter 4 – Losses Overflows

2.3.1 Pipelines

Currently SunWater has in place a strategy to replace the old areas open channels that would return the most cost benefit or operational savings. This has been in place for many years before modernisation became the flavour of the month. Example of this work can be seen in the Clare section where all but one of the 12 laterals has been converted from open channel to HDPE pipelines. In doing this, it can be seen in Chapter 5 – Results, the difference this has made to the efficiency of this section comparison to the other 2 older sections. Clare's average efficiency over the last 7 years has been 83% where as the other have been 61%.

This shows the difference modernisation can make to efficiency by eliminating the losses occurred with the open channel distribution system. By pipelining the channels, losses such as evaporation, seepage, theft and overflows can be minimised. These mechanisms are the major losses in this scheme has to deal with.

The main loss left is the meter outlet data accuracy. Recently with the upgraded laterals, a meter has been placed immediately downstream of the channel offtake. This should be give data for the lateral to help with the water balance. Unfortunately this data has not been capture as part of the regular meter runs and therefore not able to be utilised.

2.3.2 Meter Outlets

One of the single most important parts of the water supply scheme is with out doubt the metering point to the customer. In this scheme, as with the operational control, depending on the time of construction is to what type of meter and therefore accuracy has been installed.

Figure 2.4 Typical BHWSS Dethridge Wheel Meter Outlet

Predominately the majority of the meters are the Dethridge Wheel type. This was common place in the 40 water supply schemes around Australia. The Dethridge Wheel has been a cost effective way of measuring flows for a long period of time. With few moving parts, it is robust and cheap to run.

Figure 2.5 Modified Dethridge Wheel allows flow around wheel

However the Dethridge Wheel has 2 major drawbacks. The first is its problem with differing water levels through the wheel box. The Dethridge Wheel can be very accurate depending on the water level through the box, this is normally set to DFL and within a certain range can work well. As mentioned above in Section 2.2.3- Channels, the smaller channels are run normally above the DFL and therefore flood the box and makes the wheel 'bog' in the water. This normally results in the wheel under recording the flows going through the box.

The second is due to the open design of the box, it is open to tampering. Due to the high water levels run in the channels a well placed stick can stop the wheel from recording but not have a large impact on the flows going past the wheel. This loss has been termed 'metering inaccuracies' for this report.

3.0 IRRIGATION MODERNISATION

3.1 INTRODUCTION

From the previous chapter, it can be seen that the BHWSS is made up of varying design from different era's in water delivery. This is why SunWater now has to look at the technology available now and in the future to see what improvements can be made to the scheme. This chapter looks at what is has been identified previously by the irrigation suppliers in the southern part Australia for where the modernisation can start.

There is large amount of information available on the efficiency of water supply scheme's, this has been investigated for this project, but the major focus of the review was to find information available for the modernising of existing schemes. So while some efficiency reviews has been included in the review, the majority of this chapter has been written with modernisation as its major focus.

3.2 THE NEED FOR MODERNISATION

Due to recent climatic events in the recent past, Australia has become increasing made aware of the value of water on our continent. This is even more prevalent in regarding to irrigation water supplies, as approximately 70% of all harvested water in Australia is used for irrigation purposes.

The need for better irrigation practices due to efficiency has also been highlighted by the problems now encountered in the Murray Darling River Basin. Due previous ways of water management that did not change with the change in climate has left this system with a massive water shortage and is now an environmental problem.

Due to this ongoing problem, numerous studies have been done by the regulators and experts such CSRIO, Goulbourn Murray Water and associated parties to how to best address the water shortage problem.

Due to the large amount of water drawn from the river system for irrigation purposes, these regulators have been investigating the 'Modernisation of Existing Irrigation Area' theme for quite sometime. Therefore it has shown in the research for this project that steps to which they have attacked improving their system efficiencies should be a good framework for this project.

3.3 EXISTING MODERNISATION PROJECTS

In the Victoria Government report on Irrigation Modernisation it states 'Modernised Infrastructure can also deliver productivity gains from efficient delivery of water'. (Victoria Government, 2007, Pg.2) This statement is directly related to my project as some of the infrastructure delivering water in the Burdekin Haughton Water Supply Scheme is nearing 70 years old. This is made up of older type design pump sets and manually operated open channel delivery systems.

The Fairweather, Austin and Hope's (2004) report on Water Use Efficiency looks at some of the recent projects that have used modern technology to try and increase the efficiency of existing schemes. The examples used are the in the Murray River, Southern Australia's Loxton District and also Sunwater's Mareeba and Emerald water supply schemes.

The Goulburn Murray Waters initiative was by far the most technology advanced, where the Central Goulbourn No 2 Channel was converted to a Total Channel Control system. This involves all the open channel regulation and meter offtake gates being constantly monitored by a SCADA system. While this is heavily reliant on the technology driving the system, it allows the system to adjust itself dynamically to the demands placed on the system by its customers.

This project however did not look into the distribution assets of the system. So they still had evaporation and seepage losses to deal with. In the Emerald and Mareeba Water supply schemes, this was the opposite, where they attacked the seepage problem and left the existing regulation and metering point as they were.

Emerald had seepage problems through the existing earth channels that were leading to high water tables, making the land surrounding the channels unproductive. Where as in the Mareeba scheme, the old concrete lined channel has become prone to leaks between the concrete panels and was suffering leaks through piping in the banks. This led both schemes using the new technology, where HDPE lining is laid over the existing channels. By using this technique the channel seepage rates are reduced to none and the surrounding areas can again be used for irrigation purposes.

The channel lining is a relativity cost effective project as opposed to the Loxton refurbishment project. This scheme delivered water in the same manner as what the BHWSS now operates. A low head pump station and then delivering water to two hundred and twenty two farmers over 3,300 Ha via open channel and low pressure pipelines. This is similar size to the older areas of the likes of Clare or Millaroo in the BHWSS.

As the farmers were mainly small crops, the majority of growers re pumped the water on farm into their networks. Due to nature of the crops, timely water delivery was essential for the best performance yield. Due to the limited supply capacity of the delivery system, the farmers tended to over order and over water to make sure they satisfied their requirement. This practice puts more strain on an already over capacity system and is a practice that is regularly occurs in the BHWSS.

The Loxton Irrigation project has remedied this practice with the installation of a new high pressure system which now delivers water to the farmers at a pressure of 35m. This removes the need for the farmers to pump the water on farm again. Also it has increased confidence on the delivery of supplies and therefore the load on the system from over ordering.

This project is a best case scenario for the modernisation ticket, every scheme would put their hands up if this was going to be implemented for free. However the cost to deliver such systems is simply not feasible due to relatively low cost of water in the BHWSS. So areas of best return have to be developed for the schemes that cannot justify upgrades such as the Loxton Project.

So where do these schemes find what areas to direct their focus, by using the water balance to identify the highest losses in the system. Fairweather, Austin and Hope’s (2004) report confirms

this stating that calculating a system water balance is the first step to measure the efficiency with which the water is conveyed and distributed to a farm.

3.4 ESTABLISHING A WATER BALANCE

Developing a 'Water Balance' model for the BHWSS involves estimating, through best know technologies quantifiable amounts of water lost through out our delivery systems. This can be done in various forms and will be detailed in the Chapter 4 – methodology. This starting point is backed by the passage (Victoria Government, 2007, Pg. 4) in the report 'The balance of the water savings will be generated by completing the reconfiguration process across all irrigation areas and subsequently undertaking a targeted program of channel remediation works to capture leakage and seepage losses, the rationalisation of channel assets and the replacement of inaccurate meters.'

The CSRIO report on Water Savings in the Macalister Irrigation Area and Coleambally Irrigation Area also stated that major losses were 'through evaporation, seepage, leakage and operational losses.' (CSIRO, 2005, Pg. 4) This also confirms that to accurately develop a plan for modernising an existing irrigation area, these factors have to be accounted for.

A water balance is a critical starting point for this work. Primarily when the irrigation areas were first designed, water wasn't precious commodity it has it has become today. Therefore the schemes weren't designed with great efficiencies in mind. It is stated 'approximately 30% of the pumped water in the Goulburn Murray Irrigation District is lost as a result of leakage, seepage and evaporation in the channels, meter inaccuracies and overflows at the end of channels.' (Victoria Government, 2007, Pg. 7) This is again reconfirming major objectives of my project under Point 4, - locate critical points for additional metering on delivery and end of system outfalls.

The above passage from the Victoria Government report is dedicated to the delivery of the water to the customer, however the CSRIO report shows that not only can water be saved up to the delivery point but also how the on farm practices can be improved. It states that 'for furrow system' which is the favoured system in the BHWSS, runoff 'can exceed 30%'. (CSIRO, 2005,

Pg. 7) So improving on farm practices could also improve water savings in the system which is the overall main objective of the project.

3.5 OPERATIONAL SYSTEM

In many of the modernisation projects mentioned above, a lot of funds have been spent on the upgrading of the manual operational systems. This means converting the manual dropboard system to a FlumeGate type arrangement, where the Dethridge wheel has been removed. The new FlumeGate acts as both the regulation and the meter and can also be integrated with a real time operational system.

This has been trialled in the CG2 system and been shown to return excellent results. Having a automated system such as this, removes the operator error component as the system can dynamically alter the flow rate in the channel system in response to the demand. This is valuable as Rijo and Pereira (1987) found that conveyance efficiencies were higher during the week compared with weekend and at night. This is a realistic problem with the manual regulation systems of the BHWSS. As the manual areas of Clare Millaroo and Dalbeg are situated away from the nearest urban centre, overflows and the like can left for nearly 12 hours or more depending on the week.

3.6 SYSTEM METERING

After the Water Balance has been completed, and areas of interest have been confirmed. Strategic plans can be put in place to improve the efficiencies over these areas. Under Point 4 of my objectives, it is envisaged that locations to place open or closed channel metering will be found. This is also recommended in the Victoria Government report where ‘Accurate, real time data regarding flows also allows irrigation systems to be to be operated much more responsively, which can help to reduce overflows at the end of channels’. (Victoria Government, 2007, Pg. 10) This strategy is also supported by Hearn, Cameron and Jackson (1997) report simply titled ‘Water Use Efficiency : If you can’t measure it, you can’t manage it!’

This is further supported through work on the Macalister Irrigation District where ‘comprehensive outfall measurement… subsequently reducing outfall volumes by 91%’. Work done here can show that open channel systems can achieve efficiencies up to 85% and 95% for pipelines. (Victoria Government, 2007, Pg. 14)

In doing this literature review for this project, I have found that the frame work that I have set, is comparable to what has been completed by industry peers in other states. This gives some confidence that my project should be able to demonstrate the areas we should be looking at to improve our delivery system.

3.7 BENCHMARKING

Once the Water Balance has been completed, it will give efficiency result not only for the whole scheme but also where possible for the sub sections as well. This raises the question of what is an acceptable efficiency results for a water supply scheme.

This will depend on the type and amount of infrastructure which the scheme has, and what operational system the scheme has in place. It is impossible to compare a purely open channel system to a closed pipeline system, as they are open to completely different types of losses. Also some of theses types of losses just have to be accepted. For example: Evaporation for the open channels, this extremely difficult and costly to reduce so there for no open channel system will obtain 100%.

By using the schemes that have already under gone modernisation, and are generally similar in infrastructure we should be to find reasonable efficiency figures to which to compare our results. Using the data stated in the Modernising Victoria’s Food Bowl report by the Victorian Government tabled in 2007, we can compare the efficiencies gained from the existing modernisation projects.

3.7.1 Central Goulbourn Channel 1, 2, 3 and 4

The first of the projects of similar nature is the CG1234 project in the Goulbourn Murray Irrigation Scheme. Stage One of this project replaced the existing operating control system of channels 1, 3 and 4 with fully automated channel control systems. These automated gates are able to monitor and log the flow rates and total flow. Thus giving the operators improved measurement capabilities of the system and allowing the operator to do a more detailed water balance. This gives the operators more confidence to focus their refurbishment in areas that they know will benefit the scheme.

Stages Two is the process of remediation work on the channels that have been identified through stage one as being cause for the highest losses. Stage Three will be the process of automating and upgrading the meter outlets at the delivery point.

From this project, GMW was able to save 50% of the previous system losses. This gave the project area a delivery efficiency of 82% which was up from 70%.

3.7.2 Macalister Irrigation District

This project is focused on the measurement of the overflows of the system to help quantify this loss. By doing this, the scheme's operators were able to change operating habits and have reduced overflow losses by 91%. By doing this, overall efficiency of the system has risen to nearly 85% for the existing open channel scheme.

3.7.3 Coleambally Irrigation District

This modernisation program involved the installation of channel automation, upgrading meters and construction of inline metering systems. By completing these three modernisation big ticket items, delivery efficiency has risen from 75% to nearly 90%.

3.8 SUMMARY

From this chapter, it can been seen from the research completed on the modernisation of irrigation areas, significant head way has been made into improving delivery efficiencies in existing irrigations areas.

Using this previous knowledge can help direct the changes in the BHWSS in the right direction. From the research, it can be seen that through major losses in the system are metering inaccuracy and overflows. Seepage, Evaporation, Theft all attributed but it the first to a attributed to the majority of the losses.

In Chapter 4 – Methodology, using the framework from these previous projects, develop a Water Balance to derive the systems delivery efficiency for the BHWSS.

4.0 DEVELOPING THE WATER BALANCE

4.1 INTRODUCTION

From the research present in the previous chapter, using the project objectives to frame the methodology for this project, compiling the Water Balance for the water supply scheme is the main focus. From the information captured, sub area data can then be assessed and analysed.

4.2 DEVELOP A WATER BALANCE

To evaluate the benefit/costs of proposed refurbishment options, it is necessary to accurately estimate the potential water savings for each option. Before this can be established, it is first necessary to determine the current level of loss (or potential savings) that can be attributed to the identified loss mechanisms.

Losses in any one-year can vary as a function of a number of factors (climate, allocation, system condition etc…) and consequently, the identification of potential water savings will have to be based on historic records to ensure that a representative value is established.

However, as there is limited historic information available, with respect to the individual loss mechanisms, it is proposed in the future to undertake some specific monitoring to better define the individual loss mechanisms and correlate the results with the available long-term records.

Essentially, the following equation summarises the general components of a water loss assessment.

Inflows – Metered Usage = Total Losses

The total losses are comprised of several loss mechanisms as listed below:

- Evaporation
- Seepage
- Leakage
- Overflows
- Metering Inaccuracy

- Channel Filling
- Domestic and Stock Usage

Essentially if these losses and their magnitude are identified, water loss assessment can be established and a better understanding of the system efficiencies can be developed.

4.2.1 Inflows

Inflows for the Water Balance will primarily be the water pumped form the Burdekin River into the water distribution system. As mentioned in Chapter 2.2.2, there are currently 11 pump stations with 22 separate pump sets delivering water to the system.

4.2.1.1 Pumped Flow Data

The flow data to be used for the inflow is one of the critical points for this project. Up to this point in time, bulk water metering of the pumped water have been deemed a less critical maintenance issue and the metering in most cases are outdated and require immediate attention. Therefore flows in most pump station cases have to be derived off pump hours.

This means the pump curve and the critical system requirements for each pump have to be found to achieve an accurate flow recording result.

This problem however will soon be solved as SunWater has noted the necessity of bulk water metering and now has an on going meter replacement program in place to provide accurate flow data. For this project the most accurate available information will be used. The importance of accurate bulk water metering is one of the main outcomes from this study and will be discussed in detail in Chapter 5 – Recommendations.

4.2.2 Available Information/Historic Records

The availability/existence of historic records will impact upon the success/accuracy of the water loss assessment. The following data will be required for the completion of any loss assessment:

- Inflows
- Rainfall
- Overflows
- Meter Usage

It is preferred that several years of records be used to obtain an average for each of the above components, this is to ensure that the calculated efficiencies values take into account the seasonal differences between wet and dry years.

For this project it has been assumed that the inflows from rainfalls do not significantly affect the overall balance. This is due to the amount attributed from the rainfall is more than likely lost through the overflows as most channels are kept full during most slight rain periods. Due to the dry tropic nature of the environment around the BHWSS, the annual average rainfall of approximately 944mm/year is not seen as large inflows that would greater change the results of the water balance.

4.2.3 Loss Mechanisms

The water loss mechanisms for the irrigation supply system are comprised of the following components:

- Evaporation
- Seepage
- Leakage
- Overflows
- Metering Inaccuracy

- Channel Filling
- Domestic and Stock Usage

Each mechanism has been explained in detail below along with the proposed methods of calculating the magnitude of the loss.

4.2.3.1 Evaporation

Losses due to evaporation can be estimated by using the average evaporation rate for the area and the exposed water surface area.

Meteorological data is available for the majority of irrigation areas in Queensland and the average annual evaporation for the irrigation season can be determined. This value can then be applied to the average width of channel at full supply over the total length of open channel and an estimate for evaporation losses calculated.

The Bureau of Meteorology has two weather stations in the Burdekin Region that evaporation data can be used for this project. These are Ayr DPI Research Site – Station No 033002 and the Millaroo DPI Research Site – Station No 0330090. The average daily evaporation rate for Ayr is 5.7mm, where as Millaroo's rate is 4.9mm.

With this evaporation data available, an accurate evaporation result of the channels and balancing storages can be easily established and an ongoing assessment of loss registered. For example in Table 4.1 below is the loss through evaporation for the Balancing Storages in the scheme. The Balancing Storages are large bodies of water used to storage volumes of water as extra capacity in the delivery systems.

Balancing Storage	Daily Evaporation Rate (mm)	Year Evaporation Rate (mm)	Surface Area m^2	Yearly Evaporation ML
Haughton	5.7	2080.5	1545840	322
Mulgrave	5.7	2080.5	837477	174
Millaroo	4.9	1788.5	54788	10

Table 4.1 Evaporation at Balancing Storages

The evaporation rate is calculated from pan test conducted daily at the observation point. Water level in the pan is reset daily to a fixed depth by adding water to the pan or by removing water following significant rainfall. The change in depth, allowing for rainfall, is the daily evaporation.

For the Water Balance, evaporation for each section was calculated for the surface area at average DFL level for the open channels. Using this area multiplied by the yearly value for evaporation, we arrive at a volume of water that the section will lose. Evaporation rates were also applied to the Balancing Storages in the Haughton, Mulgrave and Millaroo Sections. This is shown the Table 4.1 above.

4.2.3.2 Seepage

The calculation of seepage losses are perhaps the most difficult to determine as conditions within a single area can vary considerably and often it is difficult to adequately simulate the existing channel conditions.

Soil maps are readily available for the majority of irrigation areas and these can be used to assist with seepage calculations. The length of open channel along each soil type can be determined and when combined with the average wetted perimeter of the open channel sections the total seepage loss could be estimated if the seepage rates of the various soil types are known.

The construction of all channels in the BHWSS is essentially the same, albeit on different soils. Before construction of the channel, the soils are tested for permeability. If the original solids to make the tolerances set with the design parameters, the channel is construction with ‘Channel

Quality Clays' and compacted to achieve maximum density to improve the water retaining abilities of material. This specification of the soils has worked extremely well, but due to some of the channels being place for over 50 years, they may be inline for refurbishment where the lining can be replaced and re compacted to attain the design limits.

Where the natural soils were deemed to be of non channel quality, extra excavation was required and suitable channel material replaced for a depth of 500mm under the normal thickness of channel lining. This made sure the channels could achieve maximum density at all times. These sections of over excavation however would be sections of channels that could be looked at in the further work on from this project to ascertain if the channel material is still maintaining seal.

Establishing the seepage rates of various soils is difficult. Although over time with some targeted pondage tests and permeability testing a database of information can be established. This will be a target of further projects in the years to come to find some solid data directly relating to the BHWSS channels and underlying soils types.

For this project however, theoretical information available for irrigation channel seepages rates, will be used. SunWater has done some recent trials in other water supply schemes on similar soil types and have returned similar rates

Using these results, a seepage rate of 20mm/day has been selected as a reasonable rate for open channels of the BHWSS. The channels that returned these levels were on similar soils and constructed with similar techniques and specifications.

This however is not the case for the Balancing Storages. In both Mulgrave and Haughton Storages, no preparation or compaction of the storage footprint was involved. They were naturally occurring depressions in the existing land and therefore used as storage. This lends to higher seepage rates than a specifically prepared site as the Millaroo Storage was. Seepage rates for these two natural storages can be considered to in the vicinity of 50mm a day compared to the 20mm/day of the Millaroo site. This gives seepage rates for the Balancing Storages as shown in the following Table 4.3

Balancing Storage	Daily Seepage Rate (mm)	Yearly Seepage (mm)	Surface Area m^2	Total Seepage ML
Haughton	50	18250	1545840	2821
Mulgrave	50	18250	837477	1528
Millaroo	20	7300	54788	40

Table 4.2 Seepage at Balancing Storages

4.2.3.3 Leakage

Leakage losses are attributed to cracks through structures and banks and the loss mechanism is different to seepage. Leakage is a very difficult loss to estimate, as the actual loss in a particular year could vary depending on the circumstances and consequently, the estimated loss needs to be based on averages.

No detailed investigation has been done within SunWater to estimate the losses associated with leakage. A Goulburn-Murray Water (G-MW) Report, 'Benchmarking the Distribution Efficiency of an Irrigation Supply System' (July 2000), is available and details the results of an investigation targeted at quantifying the losses associated with a distribution system.

The results of the investigation were used to quantify the leakage rate (both bank and structure leakage) as a function of volume, distance and time for the Rochester 20 Water Savings Project. A rate of 0.05ML/km/day was calculated as indicative of the leakage occurring in open channel situations. This rate could be indicative of the leakage losses in Queensland's open channel systems as G-MW channel infrastructure mirrors SunWater.

To calculate the loss in each section this rate was used with the total length of open channel for that particular system.

4.2.3.4 Overflows

SunWater does not actively monitor outfalls in the majority of irrigation schemes. This lack of historical overflow data could in essence be a barrier to accurately determine the magnitude of loss mechanisms.

Without overflow data, the credibility of the water balance may be compromised. Therefore one of the major outcomes of this project will be to identify the overflows that are used regularly as part of the operation of the open channel system. By doing this and then recommending a plan to monitor these location we can then quantify the losses accurately which will in turn show how we can best utilise our delivery system for better efficiencies

In the CG17/4 modernisation project conducted by GMW, it was found that approximately13% of the losses occurred in a similar systems to the BHWSS were accounted for by the overflow structures. This shows, out of the 8 mechanisms for loss in a system, overflows account for a large portion.

The BHWSS has 138 structures that have been built just for the purpose of overflows in the open channel system. Overflows can be in the form of either an offtake structure type (See Figure 4.1) or a bank overflow. Bank overflows are a protected depression in the bank to allow water to pass over the bank into a nearby drainage course. The overflow offtake structures have a sill height set to a height below the bank elevation, to let the water flow over into a nearby drainage course in the event where the channel water height is not able to be regulated

Figure 4.1 Overflow Structure in the Dalbeg Section

Overflows provide a safety protection for when the water level in the channels gets to high and may over top the channel banks.. They are used in the event of rainfall, operational failure of a regulating gate or a large user stops demand and the system takes some time to slow demand.

As stated previously, the operational type of the channel system to which it belongs play a major part as to how often a overflow is used. In theory in an automated channel system, the overflow should rarely be used, as the regulating system should be able to monitor and adjust the flow to meet the demand. In manual system, only the operator diligence to monitor flows versus demand can stop the amount the overflow is used.

Figure 4.2 Main Channel Overflow – With EM meter

Since the inception of this project, a flow meter has been installed on one of the 2 overflows in the Clare section. This overflow is located at the end of the 16.5km long Main Channel. Since it installation date of the 17th of June, it has averaged flows approximately 7ML/day. This figure has been used as the basis of the overflow data loss for this section. The other overflow located in these sections is on the only other open channel left in the section named Channel B8/1. Demands on this lateral are small compared to the main channel and therefore losses through this overflow are minor in comparison. However it is still a loss out of the system and therefore losses for the water balance have been derived at 2ML/day.

The overflow figures for the water balance used for the other sections however were derived from approximations from the current operators to what flows were in normal operating conditions. Nominally these were approximated at flow ranging between 3.5ML/day to 5ML/day.

4.2.3.5 Metering Inaccuracy

This is a significant and identifiable component of loss, which is based on the fact that the current metering system used (ie Dethridge wheel meters), could be under registering the volume supplied to a property.

It is appreciated within SunWater, Dethridge wheels under register significantly and measures have been undertaken to accelerate the replacement of wheels that are believed to be under registering substantially.

Accuracy of the meters can be significantly compromised (-20%) when downstream conditions drown or bog the wheels and the revenue from the sale of extra water measured by more accurate meters would very quickly cover the costs of meter replacement.

The G-MW 'Water Flow Measurement Report', (March 2002) report concluded the following statement: "The rating information available for the Dethridge meter clearly shows that there is a negative bias in the measurement uncertainty, ie in favour of under recording, rather than it being normally distributed. This bias moves further in the negative with higher operating water levels, which can be a normal occurrence in the channel operation, or with greater than design clearances, which occurs as the outlet condition deteriorates. Therefore more accurate flow measurement that is normally distributed has the potential to greatly improve water accounting, ie reduce the volume of the unaccounted for water."

The replacement of Dethridge wheels with new metering technology (PA, EM or Ultrasonic) would reduce the inaccuracy of the outlet as the new meters have a quoted accuracy of <2%. Considering the Dethridge wheels may be under registering by up to 20%, a saving of approximately 18% may be achievable, which represents a significant saving.

Currently in the BHWSS scheme, a program is in place to systematically update all Dethridge wheels to current technology equivalents. For example in the Clare Section, out of the 259 meter outlets, 97 of these have been converted to Electromagnetic Flow meters. Under current guidelines for the metering of non urban water supplies, it will soon become mandatory for

meter to comply with new Australian Standards. Currently these standard are in draft in the form of Australian Technical Specification – 4747.1 -2008 – Meters for non urban water supply, but all meters in the BHWSS will soon have to adhere to the terms set in this specification in regards to accuracy.

As the Dethridge Wheels do not comply with these limits set in ATS 4747, the current replacement program will continue on into the future until all meters are replaced. There is an estimated 500 Dethridge wheels still in service through out the BHWSS, mainly in the Clare Millaroo Dalbeg and Barratta sections.

Benchmarks test have shown the on average Dethridge Wheels under record in the farmers favour up to 20%, this has been adopted for the water balance. However as the meters in any one section are a mixture of many different types and therefore accuracy levels, this has been taken into account when the inaccuracy figure has been calculated for each sections.

4.2.3.6 Channel Filling/Draining

This loss mechanism has been included to take account of water lost during annual shutdown periods where channels are drained then refilled. This practice does not necessarily occur in all schemes however if it does, the losses due to channel filling would need to be estimated and added to the water balance.

For the water balance, this figure was calculated by the using the average cross sectional area for the water depth for each section. This was then applied to length of the channels in the section to arrive at the volume of water lost through channel draining. This practice is not often, after research conducted with the operators, allowing for one complete drainage period for each channel section would be an accurate amount for this loss.

4.2.3.7 Domestic and Stock (D&S) Usage

The BHWSS does have several D&S outlets utilised by SunWater customers. The majority of these outlets are un-metered and although each outlet has a nominal allocation attached to the property, there is no method of verifying the amount of water being taken by the customer.

As most of these outlets are just for back up supply for households rather than for stock watering the amount of loss has not been specifically calculated in the Water Balance. Due to the small amount in the overall scheme, this loss can be included in the value of 0.05ML/day/km used to calculate the channel leakage.

5.0 RESULTS AND RECOMMENDATIONS

5.1 INTRODUCTION

From the methodology set out in the previous chapter, we can hopefully deduce with some accuracy the current efficiencies that system is achieving. This chapter will show these results, discuss and suggest solutions to help improve the confidence of the results for the future modernisation projects.

5.2 OVERALL SECTIONS RESULTS

After obtaining Inflow data, Meter Usage data and calculated our quantifiable losses, delivery efficiencies can then be calculated for each of the major section of the BHWSS. This is called the Delivery Efficiency of the section. Figure 5.1 shows the overall delivery efficiency of each section over the last five years compared to similar systems in the Victorian Irrigation Schemes

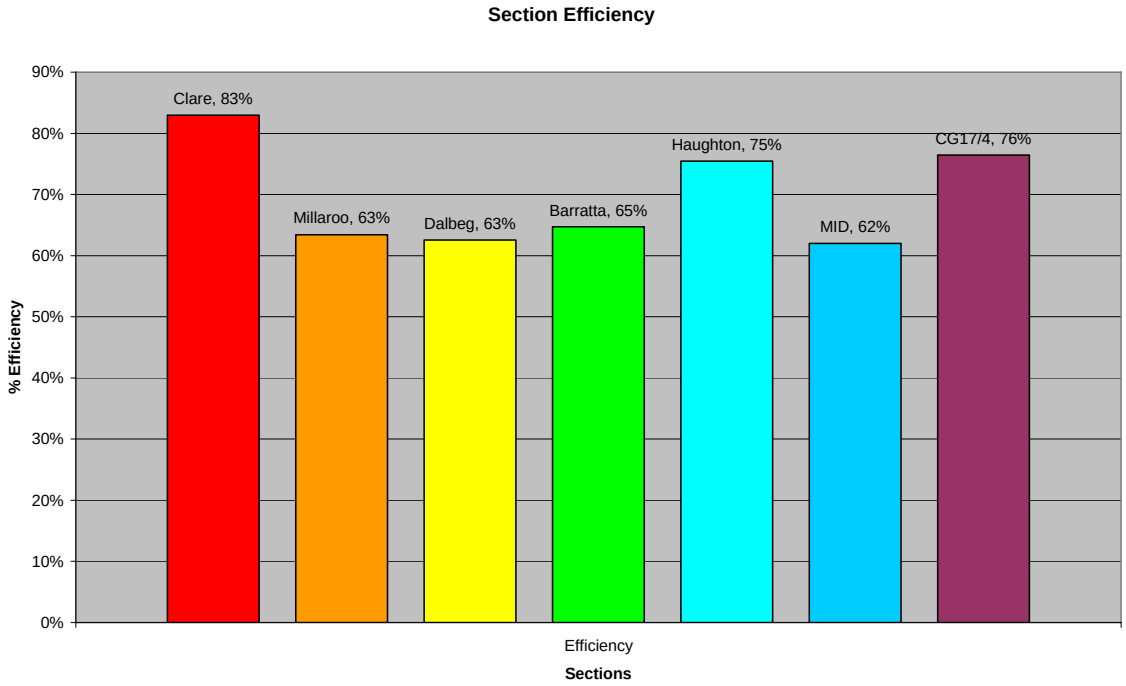

Figure 5.1 Overall Section Efficiencies

It can be seen from the section efficiencies above, that the values range from 63% to 83%, in comparison to the ANCID benchmarking of open channel distribution systems report (2006), an efficiency of 85% should be the target. In the BHWSS only the Clare section in near this value, the following section will detail where the losses are in the sections.

Figure 5.2 below shows the % of loss mechanisms over each of the section investigated. Along side the BHWSS are two projects from the GMID investigations. This is to show the BHWSS in comparison to other independent schemes. Results however are hard to compare as the operation regime for these scheme may be different.

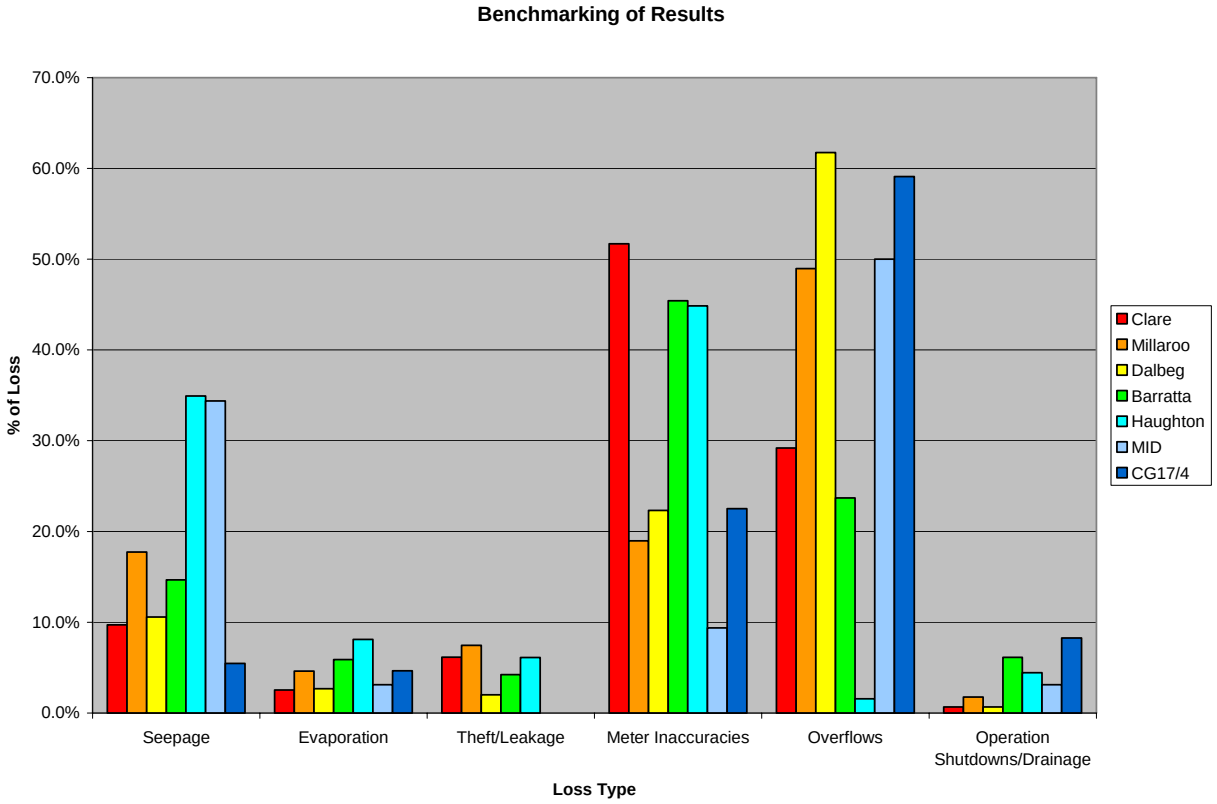

Figure 5.2 Graph of Loss over BHWSS Sections compared to the Benchmark Systems

Also in the results section, a brief description is given for each section to explain the general infrastructure and operating conditions to help differentiate between the existing systems, and therefore an accurate analysis of the given results can be observed.

5.2.1 Clare

5.2.1.1 General

Clare Section has two inflow points of Pump Station A and B. These pump into the main distributor at the top of the bank. Clare section has no balancing storage and therefore the operator have to match the pump station outputs to match the demands down the channel. Most of the laterals channels off the main channel have been converted to pipeline making Clare a reasonably efficient system to run. Efficiencies seen here should be higher than in the other to older sections of Millaroo and Dalbeg.

Even though most of the laterals have been converted to pipelines, the main channel is a manual operated drop and check type system. This means it is a labour intensive section to manage the water deliveries to match the demand.

Pump Station flow meters have until recently been, 2 differential head meters on the A rising main and an older style ultrasonic meter on the B rising main. None of the meters have returned any accurate flow data for some time, and are now in the process of being replaced by electromagnetic meters. Therefore the pumped flow data for this section has been estimated from pump hours run.

In this section there are only two overflows used, they have been calculated at 7ML/d and 2ML/d for the average of 200 operational days that water is run in the system each year.

Seepage, Evaporation, Leakage/Theft have all been calculated by the set methodology in Chapter 4.

Meter inaccuracy has been set to 10% in this section as the number of upgraded meters is almost half of the total of meters.

5.2.1.2 Delivery Efficiency

The following Table 5.1 is the Delivery Efficiency for the Clare Section.

Inflows	Year 2004	2005	2006	2007	2008
Pump Station Inflows	37485	39247	29607	31096	26824
Outflows					
Deliveries	31707	35597	21787	26786	21405
Delivery Efficiency	85%	91%	74%	86%	80%
Loss Total	5778	3650	7820	4310	5419
Theoretical Losses					
Seepage	599	599	599	599	599
Evaporation	157	157	157	157	157
Theft/Leakage 1%	375	392	296	311	268
Meter Inaccuracies 10%	3171	3560	2179	2679	2141
Overflows	1800	1800	1800	1800	1800
Operation Shutdowns/Drainage	42	42	42	42	42
Loss Total	6144	6551	5073	5588	5007
Difference	-366	-2901	2747	-1278	412

Table 5.1 Clare Section Delivery Efficiency Table

5.2.1.3 Discussion of Results

From the above table, the average efficiency of the last 5 years is 83%. Which in comparison to the benchmark projects in the GMW area and the latest benchmark efficiencies from ANCID 2005/6 report, is in the ballpark with their project results. However as this section is mainly pipelined, efficiencies of nearly 90% should be able to be achieved.

Figure 5.1 shows the comparison of the magnitudes of the losses of the section. It can be seen clearly that now due to the pipelining of the system, Metering inaccuracies account for over half the losses in this system. With the new meter technology now being able to record flow at between 2 and 5% accuracy, these losses could be halved. Although to put this in perspective, the overall total loss for the section is low compared to Millaroo and Dalbeg and the customer metering inaccuracy may actually be due to the inflow metering accuracy.

With overflows contributing 29% to the annual losses, which is actually lower than most other sections, metering on remaining overflow would meaning this figure could become one of the few known losses. Open channel operational losses make up the remainder and these compare similar to the benchmark systems used in Figure

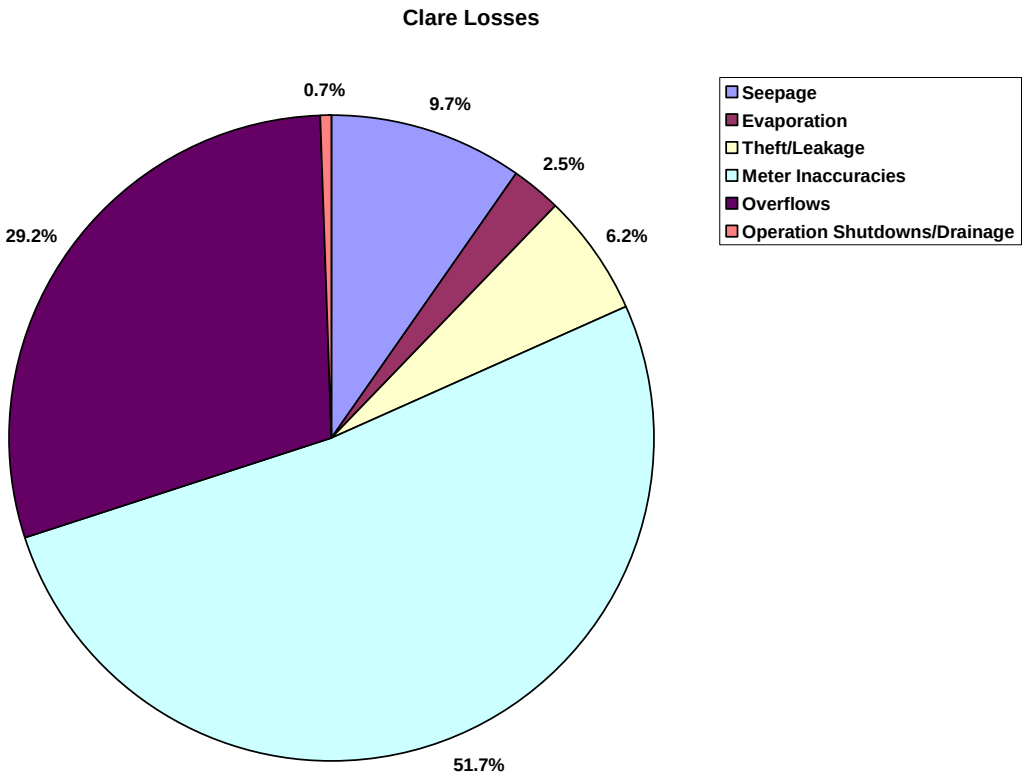

Figure 5.3 Break Up of Clare Losses

It can be easily deduced that the theoretical losses do not account exactly to the actual recorded losses. This is always going to be hard to match due to the many different factors affecting each of the losses. Although using the results of the difference between the Theoretical losses and the

recorded losses we can see if the results are consistent. The results show that Difference can vary up to 100% in either negative or positive direction.

This results show that the losses are unstable to any given year. Even though the losses for evaporation, seepage, leakage are estimated, they should be relatively consistent for each year. The sensitivity of these loss rates will not contribute to the factors the losses are mismatching by.

This leads to the questioning the accuracy of the metering, we know that the Dethridge wheels are known to have issues with accuracy, but seeing though half of these have been replaced by new accurate technology meters the accuracy of 10% is believed to be realistic. Therefore the bulk water meters on the pump stations are identified as being the most inconsistent.

Research into how these values of pumped volumes showed how estimation of volumes is the norm as the differential head meters in Pump Station A and the ultrasonic in Pump Station B rarely returned usable values. Whilst using operator estimated pump hours can be accurate in a simple situation, this does not allow for the change of pumping efficiency of each pump under different operating conditions.

This can be seen with sensitivity analysis of the data by changing pump station accuracy in Table 5.1. Trials showed that Difference between the Theoretical and Actual losses could be matched by changing the accuracy of the pumped totals. This is shown in Table 5.2 below.

Inflows	Year				
	2004	2005	2006	2007	2008
Pump Station Inflows	37485	39247	29607	31096	26824
Correction Factor	101%	107%	91%	104%	98%
Adjusted Inflows	38027	42177	26833	32387	26408

Table 5.2 Adjusted Clare Pump Flows

This shows that pump station bulk water readings only have to be out less than 10% to affect the balance dramatically.

5.2.1.4 Recommendations

From Table 5.1 we can see that the major losses are through Metering Inaccuracy – both Bulk and Customer and through the overflows in the system. Losses through evaporation, seepage and leakage together make up for just one of these losses.

So recommendations for the Clare section are :

1. Upgrade Bulk Water meters
    a. 6 new meters would be needed to obtain these results
2. Continue Customer metering upgrades
    a. Over a hundred Dethridge wheels still exist in this section
3. Install a flow meter on the remaining open channel overflow structure on B8/1
    a. Installing this meter would be the cheapest option out of all three and also change the accuracy of this loss down to 2-5% of actual flow through the meters.
4. Maintain and Record the flow meters placed in each upgraded pipeline lateral.
    a. Channels (pipelines) A2, A4, A4/2 and B3 all have in line metering installed just down stream of the main channel offtake. These meters have never been used to do a channel water balance.

5.2.2 Millaroo

5.2.2.1 General

Millaroo Section is located 20 km up stream from Clare. The system is generally very similar to the Clare System with two pump station delivering water to the main channel running parallel to the bank the of Burdekin River.

From Millaroo's 12 lateral distributing channels only 7 of these are pipelines and many of these only supply one or 2 farms at most. So the majority of the farms in this section are served by the open channels.

The main operating system of Millaroo is similar to Clare with the main channels and other open channel lateral being manual operated type channels. With one exception being Channel 2, where it has been reconstructed for further expansion in the future. This channel has been automated with SCADA controlled regulating gate. This Channel also has a 82.5ML in line storage built to have back capacity in the system, and take load off the main channel in the time of peak demand.

5.2.2.2 Results

The following Table 5.4 is the Delivery Efficiency for the Millaroo Section.

Inflows	Year				
	2004	2005	2006	2007	2008
Pump Station Inflows	33970	36428	28626	32245	29076
Outflows					
Deliveries	21156	24739	16665	21886	17661
Delivery Efficiency	62%	68%	58%	68%	61%
Loss Total	12814	11689	11961	10359	11415
Theoretical Losses					
Seepage					
Channel	1812	1812	1812	1812	1812
Balancing Storage	40	40	40	40	40
Evaporation					
Channel	471	471	471	471	471
Balancing Storage	10	10	10	10	10
Theft/Leakage	763	763	763	763	763
Meter Inaccuracies 20%	4231	4948	3333	4377	3532
Overflows	5000	5000	5000	5000	5000
Operation Shutdowns/Drainage	181	181	181	181	181
Theoretical Loss Total	12508	13224	11610	12654	11809
Difference	307	-1535	352	-2294	-394

Table 5.3 Millaroo Section Delivery Efficiency Table

5.2.2.3 Discussion of Results

From these results, the delivery efficiency of the Millaroo system over the last past 5 years is 64%. In comparison to the benchmarked good practice of 85%, Millaroo is well down.

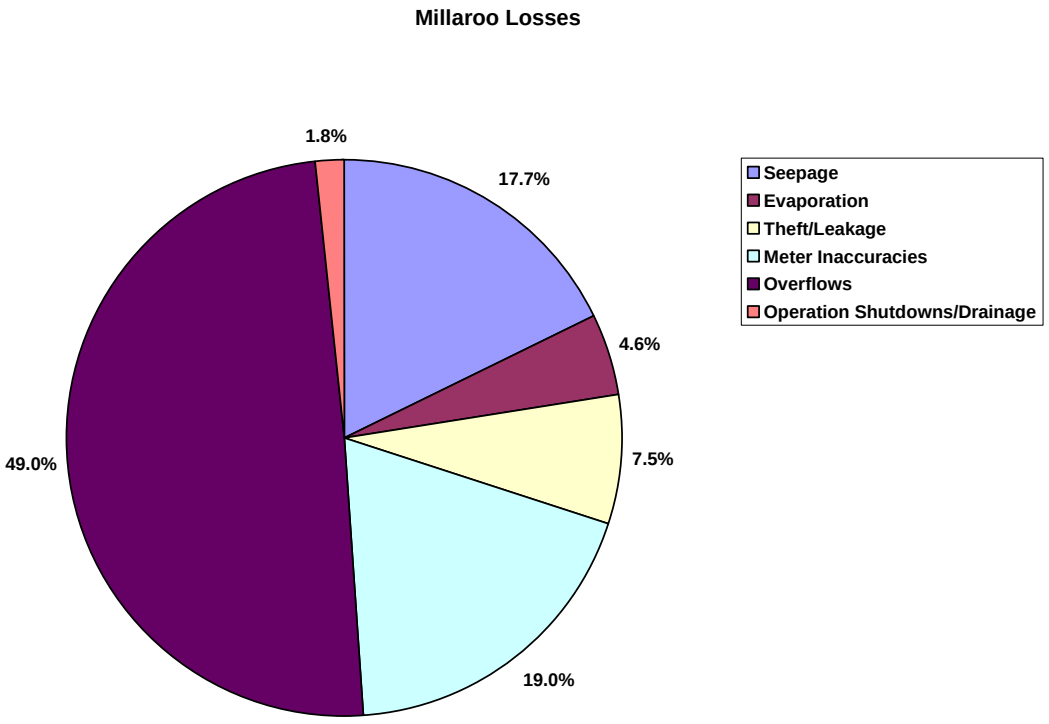

Figure 5.4 Break Up of Millaroo Losses

The metering inaccuracy of this section was set to 20%, as only 30 meters have been converted to new technology meters. Also as the major distributors in the Millaroo section are still open channel check operated type, there are 6 overflows used regularly. These were estimated by the operators to have flows of 3.5ML/day through to 5ML/day depending on which channels they were located.

Again Bulk water metering at both stations is not accurate and are estimated off pump hours. This leads to the same accuracy of Clare and adjusted figures to claim the same losses as theoretical losses are shown in the Table 5.5.

Inflows	Year				
	2004	2005	2006	2007	2008
Pump Station Inflows	33970	36428	28626	32245	29076
Correction Factor	59%	104%	99%	107%	101%
Adjusted Inflows	19901	37963	28274	34539	29470

Table 5.4 Adjusted Millaroo Pump Flows

This shows that pump estimates only have to be inaccurate by 7% to upset the water balance.

5.2.2.4 Recommendations

Recommendations for Millaroo are very similar to Clare. But with the major losses being the overflows and metering inaccuracy, again both Bulk and customer's meters were to blame. With the overflows, a worthy point to note, that there are actually 9 overflows throughout the system. With discussion had with the operators, the three located on the automatically regulated Channel 2, were deemed not used as water rarely if ever overflows at this point. This fact reinforces the importance of operational channel type to the efficiencies able to be gained.

Recommendations of change to increase accuracy of losses should be:

1. Upgrade Bulk Water metering
2. Install meters on the overflows of the open channel laterals
3. Continue the conversion of the Dethridge meters to modern ATS 4747 approved meters.

5.2.3 Dalbeg

5.2.3.1 General

Dalbeg is the last of the original sections of the BHWSS to be examined. Like Clare and Millaroo, Dalbeg is served by two pump station located on the left bank of the Burdekin River approximately another 20 km up stream from Millaroo. The second pump station in all of these sections is used to for extra capacity and useability of the lower ends of the main channels.

As the same with the two previous sections, the main channel is the main distribution that runs parallel to the bank of the Burdekin River. This main channel is approximately 12km long and has 6 laterals that supply the farm inland. Of these laterals there is only the 3.5km long Channel 1 that is an open channel configuration. All the others are pipelines, with the 4.5km long Channel 2 be the main supply line out of those.

The majority of 104 in this section however are still Dethridge wheels, with only 25 meter being converted to a modern equivalent. However of these new meters they have located on the laterals

with the highest usage. The usage has been worked off the flow data since their conversion, so that might be saying something indirectly about the accuracy of the other existing meter data.

Table 5.6 shows the break up of the infrastructure of the Dalbeg system.

The operating system of the Dalbeg open channel systems is again the same as Clare and Millaroo utilising the check board system to regulate the flow. Again this opens the system to overflows from the operators not being able to match the main channel demand to the pump outputs.

5.2.3.2 Results

Inflows	Year 2004	2005	2006	2007	2008
Pump Station Inflows	21719	22477	17353	16435	14932
Outflows					
Deliveries	12411	14495	10064	11362	9557
Delivery Efficiency	57%	64%	58%	69%	64%
Loss Total	9308	7982	7289	5073	5375
Theoretical Losses					
Seepage	557	557	557	557	557
Evaporation	141	141	141	141	141
Theft/Leakage	106	106	106	106	106
Meter Inaccuracies 20%	2482	2899	2013	2272	1911
Overflows	3250	3250	3250	3250	3250
Operation Shutdowns/Drainage	36	36	36	36	36
Theoretical Loss Total	6572	6989	6103	6362	6001
Difference	2736	993	1186	-1290	-626

Table 5.5 Dalbeg Section Delivery Efficiency Table

5.2.3.3 Discussion of Results

Dalbeg's results are almost a mirror image of Millaroo. Efficiency over the last 5 years is exactly the same with a result of 64%. The main sources of losses again are the metering inaccuracy and overflows. There are 6 overflows along the open channel sections of Dalbeg, with 4 of these used regularly. None of these are metered and the flows have been estimated by the operators.

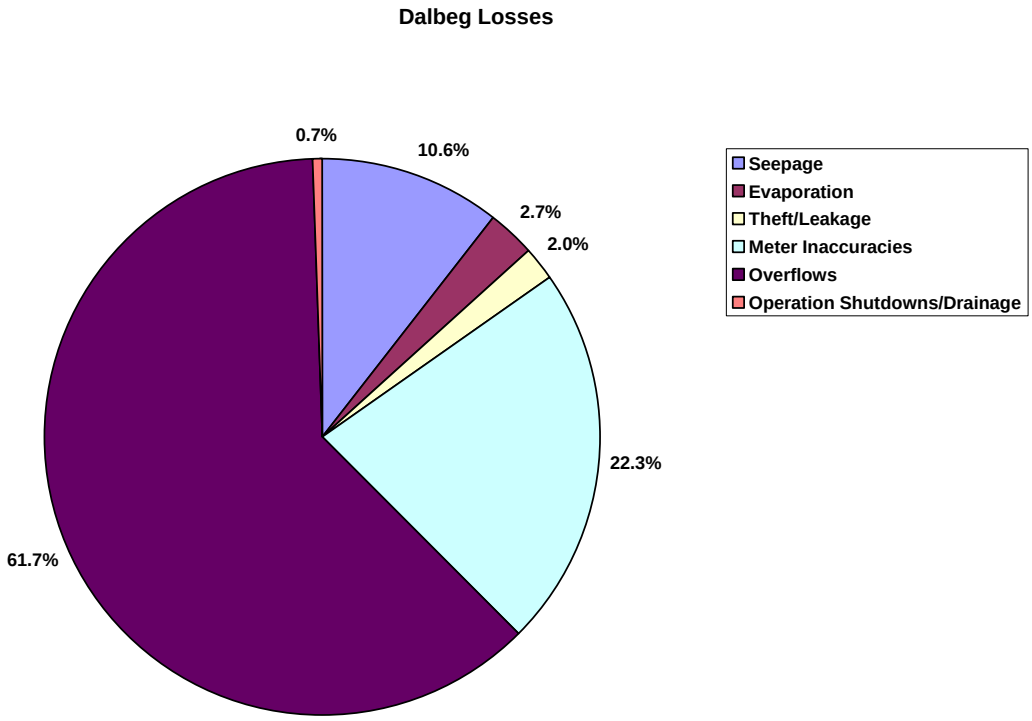

Figure 5.5 Break Up of Dalbeg System Losses

Once again the bulk water meters on the pump station have not been serviced or returned usable data for quite some time. So these flows have been estimated by the operators off pump hours.

Table 5.7 Shows Adjusted Pump Flows for Dalbeg

Inflows	Year				
	2004	2005	2006	2007	2008
Pump Station Inflows	21719	22477	17353	16435	14932
Correction Factor	51%	96%	93%	108%	104%
Adjusted Inflows	11136.63	21484	16167	17725	15558

Table 5.6 Adjusted Dalbeg Pump Flows

Like the previous two older systems, these results for the adjusted pump data shows that the just by under or over estimating of the pump flows can return the results given in the previous table. This is acceptable as the pumps will not always run on their duty point and therefore maybe run more or less efficient.

5.2.3.4 Recommendations

As with the previous sections, Dalbeg is no different to the recommendations of that the section could use. These are:

1. Upgrade Bulk Water metering
2. Install meters on the overflows of the open channels.
3. Continue the conversion of the Dethridge meters to modern ATS 4747 approved meters.

By doing these three, accuracy of data would be increased dramatically and therefore confidence to focus the modernisation projects on area that would return the most cost benefit would be achieved.

5.2.4 Barratta

5.2.4.1 General

The Barratta Section was the first section of the new area's developed in the mid to late 80's. The Barratta section incorporates the sub sections known locally of Jardine, Mulgrave, Northcote and Mona Park. The sub sections are all serviced by lateral open channels off Barratta Main Channel (BMC).

The BMC is approximately 40km long, with the Mulgrave Balancing Storage at the 4km mark. The BMC itself is supplied off the Haughton Main Channel. There is no flow metering at this diversion point, making it extremely difficult to ascertain flows delivered down the Barratta Main Channel.

This main channel is an automatically regulated control system, but due to the age it was developed incorporates the float regulator technology. This involves the regulator gate being set at the DFL in the channel, when the level in the channel drops the float drop and opens the gate. This type of gate is a simple solution and they have worked well since inception. However they do not have any allowance for final adjustment of flows. This can cause amounts of water to travel down the channel system that aren't really required. Therefore cause losses through the systems overflows.

There are 15 overflow points on the system, and depending on location, lose volumes of water between 3 and 5 ML/day.

There are 72 customer meters along the BMC and 154 meters along the laterals. Of the Main channel meters 57 are propeller actuated, one Electromagnetic and the remaining are Dethridge wheels. The lateral channel meters are comprised of 125 PA type, 1 ultrasonic, 3 electro magnetic and 25 Dethridge wheels.

With majority of these meters being PA, this metering inaccuracy should be less than the section with the majority of Dethridge wheels, but due to weed growth in the system the PA meters are prone to fouling and then under recording.

5.2.4.2 Results

Inflows	Year 2004	2005	2006	2007	2008
Pump Station Inflows	164405	172913	134434	133231	124345
Outflows					
Deliveries	103523	123107	75894	93300	78173
Delivery Efficiency	63%	71%	56%	70%	63%
Loss Total	60882	49806	58540	39931	46173
Theoretical Losses					
Seepage					
Channels	5157	5157	5157	5157	5157
Storages	1528	1528	1528	1528	1528
Evaporation					
Channels	2516	2516	2516	2516	2516
Storages	174	174	174	174	174
Theft/Leakage	1925	1925	1925	1925	1925
Meter Inaccuracies 20%	20705	24621	15179	18660	15635
Overflows	10800	10800	10800	10800	10800
Operation Shutdowns/Drainage	2792	2792	2792	2792	2792
Theoretical Loss Total	45598	49514	40072	43553	40527
Difference	15285	292	18468	-3622	5645

Table 5.7 Barratta Section Delivery Efficiency Table

5.2.4.3 Discussion of Results

The results for this section are surprising, to see a relatively modern system perform with relatively poor results with an average delivery efficiency of 65%. Seepage has high results here in comparison to the other sections but it is in proportion, as Barratta has over 105km of combined earth channels. Metering inaccuracy and overflows are the two sections here that need to be addressed.

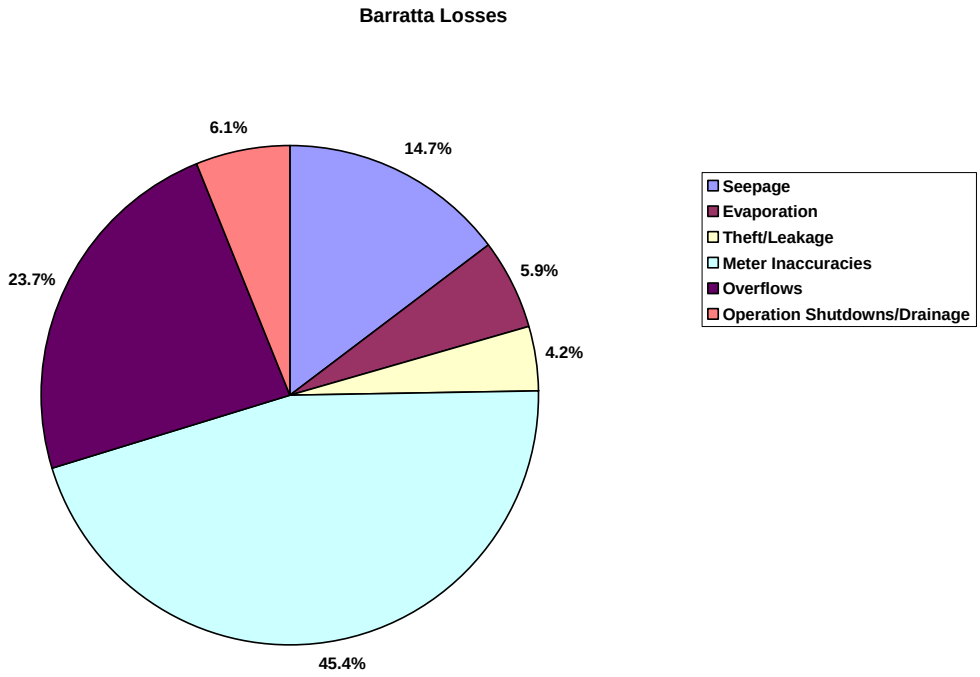

Figure 5.6 Break Up of Barratta System Losses

Also the very fact that it not accurately known what flows go down this channel to start with, it is impossible to say with any kind of accuracy what these flows are. For this project analysis, the area served between Haughton and Barratta has been used to proportion the flows from Haughton Pump Station. This is the closest form to an accurate figure, given the data available.

5.2.4.4 Recommendations

Recommendations are hard to establish for this section, due to the poor base data available. So it can only be the recommendation to meter this offtake to the Barratta Main Channel from the Haughton Main Channel.

This could be done by the insertion of an open flow meter into the channel just down stream of the offtake. Due to the offtake of a sub lateral however being in the pipeline from the offtake to the start of the main channel, this lateral would also have to be metered as well. This could be done by an ultrasonic meter in this siphon. Section 6.3 – Flow Metering, describes the new accurate flow meter technology that is now available for this very application.

5.2.5 Haughton

5.2.5.1 General

The Haughton section is last of the new area to be constructed. The Haughton section combines sub sections locally known as Selkirk and Haughton. These areas are served by the 62.5km long Haughton Main Channel which is mainly a earth open channel with the exception of a 1.7km long section which has been concreted lined.

Differing to the Barratta system, the main channels regulators are water level sensor driven and can also be adjusted and monitored remotely by the operators by the SCADA system. This allows the operators to easily adjust the water levels in the channel to match the user demand.

The Haughton Section also has the large in line storage in the scheme called the Haughton Balancing Storage. This is located at a distance of 31km along the main channel, this site was originally a local swamp and large of amount of weed accumulates in it.

There are approximately 190 meters in the Haughton section, with all but 3 are PA type meters. These meters are generally more accurate than the Dethridge wheel, but again due to weed infestations, the PA meters are subject to fouling. So therefore their accuracy is compromised.

There are thirteen lateral channels the supply the Haughton and Selkirk sub sections, these are all open channels except for 4 relatively short sub laterals. No flow metering devices are used on these laterals, although regulator gates could be configured to store this type of data. Although to do this would require major hardware up dates. Exacting this data at this point in time is sometime futile due to types of hardware particular gates are equipped with.

5.2.5.2 Results

Inflows	Year 2004	2005	2006	2007	2008
Pump Station Inflows	124952	131419	102173	101259	94506
Outflows					
Deliveries	95478	103581	69370	81146	69954
Loss Total	29474	27838	32804	20113	24552
Delivery Efficiency	76%	79%	68%	80%	74%
Theoretical Losses					
Seepage					
Channels	8330	8330	8330	8330	8330
Balancing Storage	2821	2821	2821	2821	2821
Evaporation					
Channels	2268	2268	2268	2268	2268
Balancing Storage	322	322	322	322	322
Leakage	1952	1952	1952	1952	1952
Meter Inaccuracies 15%	14322	15537	10405	12172	10493
Overflows	500	500	500	500	500
Operation Shutdowns/Drainage	1416	1416	1416	1416	1416
Theoretical Loss Total	31930	33145	28014	29780	28101
Difference	-2456	-5307	4790	-9668	-3549

Table 5.8 Haughton Section Delivery Efficiency Table

5.2.5.3 Discussion of Results

Haughton section delivered efficiency results of an average 75% were what was expected of this system. Even though the actual pumped flows have been arrived at by estimating the proportion as explained in Section 5.2.3.4, this shows that the losses and the theoretical losses are relatively close. This of course could be rectified with the installation of an open channel flow meter at various locations along Haughton Main Channel assist with try to achieve an accurate Water Balance.

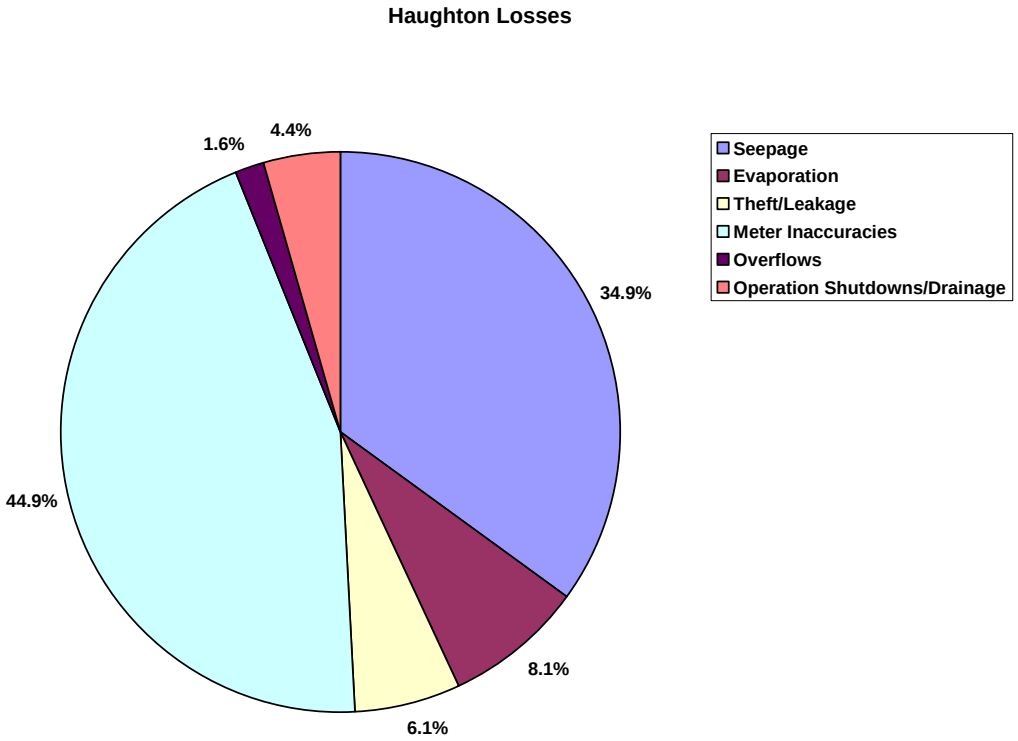

Figure 5.7 Break Up of Haughton Losses

Due to the automatic nature of this system, operators rarely have to use the in built overflow structures. That is why the overflow loss for this section is so low compared to the other sections. Essentially the biggest loss here is the metering inaccuracy of the PA type meters caused mainly by weed clogging the propeller.

5.2.5.4 Recommendations

Due to this section actually working quite well, there are some obvious recommendations that could be made to help improve the accuracy of efficiency numbers. These are:

1. Install inline metering along HMC
    a. This would include several locations, for example at the start of the channel, mid way, up and downstream of the Balancing Storage – to help ascertain actual losses in the storage.
    b. Meter installs at the offtake of the lateral – would assist greatly in the compilation of the water balance, and also operation of the channels.
2. Upgrade PA type meters
    a. This would entail using the impedance free flow tube type meter as the like of Electromagnetic and Ultrasonic Type meters. This would allow the weed to not cause any interruption to e the metering process.

6.0 CONCLUSIONS

6.1 INTRODUCTION

From the results and recommendations in the previous chapter it can be seen due to the variety of variables in each section that a standard approach to improve the efficiencies is going to be hard to deduce. This chapter will address these issues and set a plan for further research and project work that could help improve overall systems efficiency.

6.2 CONCLUSIONS

Throughout this body of work, even though the sections are operated differently and sometime unique to themselves, a common recommendation of every section has been the importance of reliable and accurate measurement.

This is the foundation on which the accuracy of the Water Balance should be built. It is obvious through the results that the inflows from each of the sections is not reliable and therefore shows up in the water balance for each section.

Inflow measurement through reliable and accurate flow meters would be the ideal start point for the BHWSS. This would take away from the guess work that is currently used.

Inline metering would be the next item on the list, this was shown up in the Barratta and Haughton sections, which are the two largest section in the BHWSS. By pumped figures, these two sections are delivered nearly 75% of the total of water pumped in the whole scheme. There is currently not one flow meter on the whole distribution network recording accurate flows.

From Chapter 7.1.3, for approximately $50,000 per installation, an open channel configuration ultrasonic can be installed or for around $20,000 for piped ultrasonic meter can be installed at critical locations to help calculate the water balance. The map in Appendix D identifies the locations that could be used to improve the water balance.

With meters in these locations, the data recorded can also be used to help shore up figure given for losses that are thought to be relatively accurate. These losses such as evaporation, seepage and leakage would be able to be investigated and seepage rates for example would be able examined on the current rates used.

The other common occurrence on the recommendation list is the metering of overflows. As the overflow loss from the older sections is a high percentage of the overall loss, knowing these losses accurately would be invaluable. By quantifying these accurately, the operators can see the amount going through the overflows in black and white through the data recorded and then be more diligent in reducing this flow.

If these recommendations were implemented, the systems losses through metering would be able to accurately represent in the Water Balance model. This would then leave the theoretical losses to be investigated further.

6.3 FURTHER WORK

Further work from this project could be wide and varied. Research into each loss could be carried out. Also research into the financial savings of these reduced losses could save the operational cost of the BHWSS. As a more efficient system means less water pumped for no net gain. This means the least amount of water is lost as possible.

By doing this, the scheme can save money on their highest variable cost, the electricity cost used for pumping water. If the scheme were to continue with the current program of upgrading meters, future work can be done on the theoretical losses to ascertain whether the values used in this report for seepage, evaporation and leakage can be used with confidence.

By completing pondage test on open channel bays in various sections or in locations where seepage may be an issue, it can increase the data on the seepage rates of the subsoils in the BHWSS. For example where subsoil conditions were known to be a problem, loss due to seepage may be able to pinpointed and future refurbishment work may be able to be directed to

refurbish the channel lining. Further detail has been included for the locations of possible testing in Section 8 – on going monitoring.

Evaporation pan test can be taken in each section, to accurately apply this rate to the open channel and balancing storage surface areas. From the Bureau of Meteorology data, average rates between 4.9 and 5.7 mm/day were given for the two nearest sites. So some results in section located further away from these two sites are Millaroo and Ayr may have differing average rates.

Further work could also entail, researching the most cost beneficial locations on the channel to meter this would provide more detailed information for the water balance. This work would look at the actual costs involved of installing these new meters, as some locations are easier to install than others. The map included in Appendix D – shows the selected locations and type of meters where metering would be installed if cost was not an option. But due to the costs of installing these meters, SunWater's current budget would allow just one meter a year to help with this task.

7.0 AVAILABLE METERING TECHNOLOGY

7.1.1 General

From the recommendations for each of the sections above, it can be seen clearly to help quantify the losses with confidence, accurate metering must be in place. The sub chapter will discuss the new technology available for flow metering.

As stated in the Chapter 4.3, all new meters installed from the July 2009 will have to comply to the specifications set in the Australian Technical Specification 4747. This specification also states that all meters currently used for customer meters will have to comply by the 2020. This means water supply schemes will have to have a program in place to replace the current non compliant meters. In the BHWSS, this would include the Dethridge wheel type meter. SunWater currently has that plan in place, but these emplacements are expensive and time consuming to replace.

7.1.2 Electro magnetic Flow Meters

7.1.2.1 General

The Electromagnetic type flow meter is currently the preferred option to replace existing meters or install in green field site. Electromagnetic flow meters work on Faraday's Law of Magnetic Induction. As water flows through the pipe it acts as a conductor, which induces a voltage which is proportional to the average flow velocity. This means the higher the flow rate, the higher the voltage

These meters are extremely reliable and also accurate when installed correctly. They also have the benefit of having a no obstructions in the flow tube. Therefore weed and other matter that may flow through the pipe won't cause the meter not to record a flow. Also this type installation allows for very little head loss through the meter.

These meters are normally installed in the delivery pipeline, but there are types that are able to be installed at the end of a pipeline. The only drawback for these meters other than the initial outlay is the pipeline must run full to achieve an accurate flow measurement.

7.1.2.2 Cost

Cost of an Electromagnetic meter is the only hurdle for this type of meter. Cost is dependant on the size of the meter, but in relation to current meters used, such at a PA type meter can be up to 400% more expensive. Most meters used in the BHWSS are normally between 300mm and 600 mm in diameter. Cost for these size meters range between $3,500 and $6,000. Typical total meter conversions can cost between $10,000 and $30,000 for each meter emplacement to make the meter compliant with the new ATS 4747.

7.1.3 Ultrasonic Flow Meters

7.1.3.1 General

These types of meters are also non mechanical type, they work by shooting sonic type beam through sensors placed on each side of the channel or pipe. Like the EM meters, the ultrasonic type is a non intrusive meters so are suitable to be used where weed and debris may be present in the water.

These meters are relatively expansive compared to EM in smaller diameter pipes of 600mm diameter or less, but above this limit the ultrasonic meters come into their own as the can be installed relatively easily on large diameter pipes.

Ultrasonic technology can also be used in open channel configuration. Normally these require more sensors than closed conduit metering type but can achieve very accurate results under the correct conditions. Although flow levels and rates can affect these readings, for the majority of the distribution season it would not be a problem.

This is particularly relevant to the BHWSS as the bulk water metering is in need of upgrading and these meters, both open channel and pipe could be extremely useful for this application

7.1.3.2 Cost

As mentioned above cost for ultrasonics in closed pipe is relatively expensive for small diameters. With a minimum standard installation costing $6000, an electromagnetic meter would be cheaper up to the point of around 600mm. Although any size up to approximately 2000mm in diameter can be metered up to approximately $12,000.

Open channel meters however are more expensive as they are relatively new on the market. Using the same technique as the piped equivalent, they require transducers to be installed in the channel. Costs for this type of meter are approximately $40,000 a site.

7.1.4 Flume Gates

7.1.4.1 General

Flume gates are currently for a measurement and flow control tool extensively in the Murray Irrigation area. These gates incorporate a radial gate along with a series of water level sensors to calculate the flow. It is not known as to whether theses gates will meet the accuracy required by ATS4747.

7.1.4.2 Cost

Flume gates in normal offtake situations approximately cost $11000 an installation. Even though this is more costly than an equivalent electromagnetic meter, the Flume gate is able to remotely actuated and therefore adds to the management to the whole of system.

These gates can also be in large situation then just the meter outlets. These can also be used in the channel offtakes that currently don’t have automated regulation and also provide flow data to the operators.

8.0 ONGOING PLANNING AND MONITORING

8.1.1 General

It is planned from the preliminary work completed in this project dissertation that the following undergraduates at the Burdekin SunWater office will continue the work that has been started here. Many different works could be conducted to help construct an accurate water balance model. This section will detail the plan for each sub area needed to obtain this achievement.

8.1.2 Clare

Due to the previous modernisation work completed in this section of the BHWSS, the efficiency results are within range of the standard set by the ANCID Benchmark Report. This shows that the work completed previously has isolated the losses that previously were occurring in the system. This can be seen by comparing the sections results of Millaroo and Dalbeg to this section. Clare was essentially identical in infrastructure and operational type to these two sections. This has led to approximate water saving of 5,000ML/year.

As Clare has now only one overflow unmetered left on Channel B8/1, metering this would lead to all overflow loss being measured in the Clare section. This would give the water balance its only real data to accurately record a total component of a loss. By doing this that would lead to the remaining losses being a function of Seepage, Leakage, Drainage and Metering Inaccuracies.

By doing pondage test in selected Main Channel and B8 bays, seepage could be accurately calculated, evaporation and drainage can be calculated, leaving leakage and metering inaccuracies as the mechanisms to assess.

Also the results from this on going investigation, the results could be used for the Dalbeg and Millaroo sections, as the soil and infrastructure types are relatively similar throughout the sections. Giving a good return for the research.

Appendix F shows the current infrastructure layout of the Clare System, also the locations for extra metering at Channel B8/1. Also this figure shows the location of the current lateral meters currently installed but not being utilised. This is now being rectified with the monthly recording

of these meters to be recorded into the meter usage database. By doing this on these pipelines, it will be able to deduce what the metering accuracy is currently on some of the new technology installed. These results will have flow on effects through out the other sub section balances as the meter accuracy from Clare A1 and A4 pipelines will show the accuracy of the PA type meter. Channel A2 and B3 will show the accuracy of the EM type meters.

With this ongoing works, along with the current installation of new meters in the pump stations, it is hoped that the results in the Clare section will be mirrored over the Millaroo and Dalbeg systems.

8.1.3 Millaroo and Dalbeg

As Millaroo and Dalbeg are close in infrastructure the on going planning and monitoring would almost be identical. Using the data from the Clare upgrade projects, the results for the rates would be used to identify the areas to investigate. But it can be seen from the results of the efficiency charts, Millaroo and Dalbeg's overflow losses are responsible for 49% and 62% of the total losses.

There are 10 overflows that contributed to these losses, as the cost of metering all of these overflows would prohibitive. A study to investigate the demand against matching the pump capacity would illustrate how the current operational management may need some reviewing. Available pump capacity could be investigated to ensure that there is adequate flexibility available for the operator to match the flows needed. Along with the upgrading of the bulk flow metering at the pump stations, this may show another area that the BHWSS could use to improve the efficiency.

Dalbeg has, apart from the Main Channel, only one open channel system left. Channel 1 has been earmarked for future replacement with a pipeline, but work was stopped, due to the over the last 5 years only an average of 750ML a year has been delivered and the cost to replace the channel with a pipeline was over a 2 million dollars. Using that money to replace meters throughout the other sections would return a much better cost benefit return.

From research with the operators only the overflow at 12.5km on the main channel is used regularly. This would provide an excellent location for this system to be monitored. Providing

reliable data in this part of the system where all the laterals are pipelines. Then at the top of the system, Channel 1 and its sub laterals 1/1 and 1/3 all have a overflow, by monitoring this systems outfalls more diligently efficiencies maybe able to be improved. Due to the amount water delivered down this channel, overflows should not be a large amount. Although in research with the operators it was estimated that over 1500ML/yr was lost through these three overflows. This theory may have to be investigated further, to ascertain whether water here is being lost for no reason. Changing operational procedure for this channels, may provide significant instant gains.

8.1.4 Barratta and Haughton Sections

As stated in the recommendations in Section 5.2.2.4, the inflow into the Barratta Main Channel is currently un metered, and therefore inflows are derived off total served area. This leads to certain inaccuracies for the water balance at the very top of the system. As can be seen in Figure 8.3 below, the arrangement at the top of this system is complicated by the BA1 offtake being supplemented from the same offtake structure that supplies the BMC. This means if a meter was to be placed at this inlet structure, a meter would also have to be placed in the BA1 Supplement pipeline as well. So two meter would have to be installed. This would have to be taken into consideration as then a open channel flow meter might be better suited in the location up stream of the inlet structure.

A cost analysis would have to be done for this system to be metered accurately and cost effectively.

As the length of channels in the Barratta system is far more than the smaller previous sections, the seepage/ leakage amount are far greater and amount to vast amounts of water. Therefore these are quite significant to the water balance and the environment. By selecting the end of channel bays in the Barratta system at Channels Ba 1, Ba 1/1, Ba1/2, Ba9, Ba9/1, BMC, Ba5, Ba5/1, Ba5/2, Ba8 and Ba8/1, (See Appendix G for locations) pondage test can be conducted over the entire area of the section. This would give results that could be utilised into the water balance model. This would either confirm or dispose the current seepage loss rates used through the system.

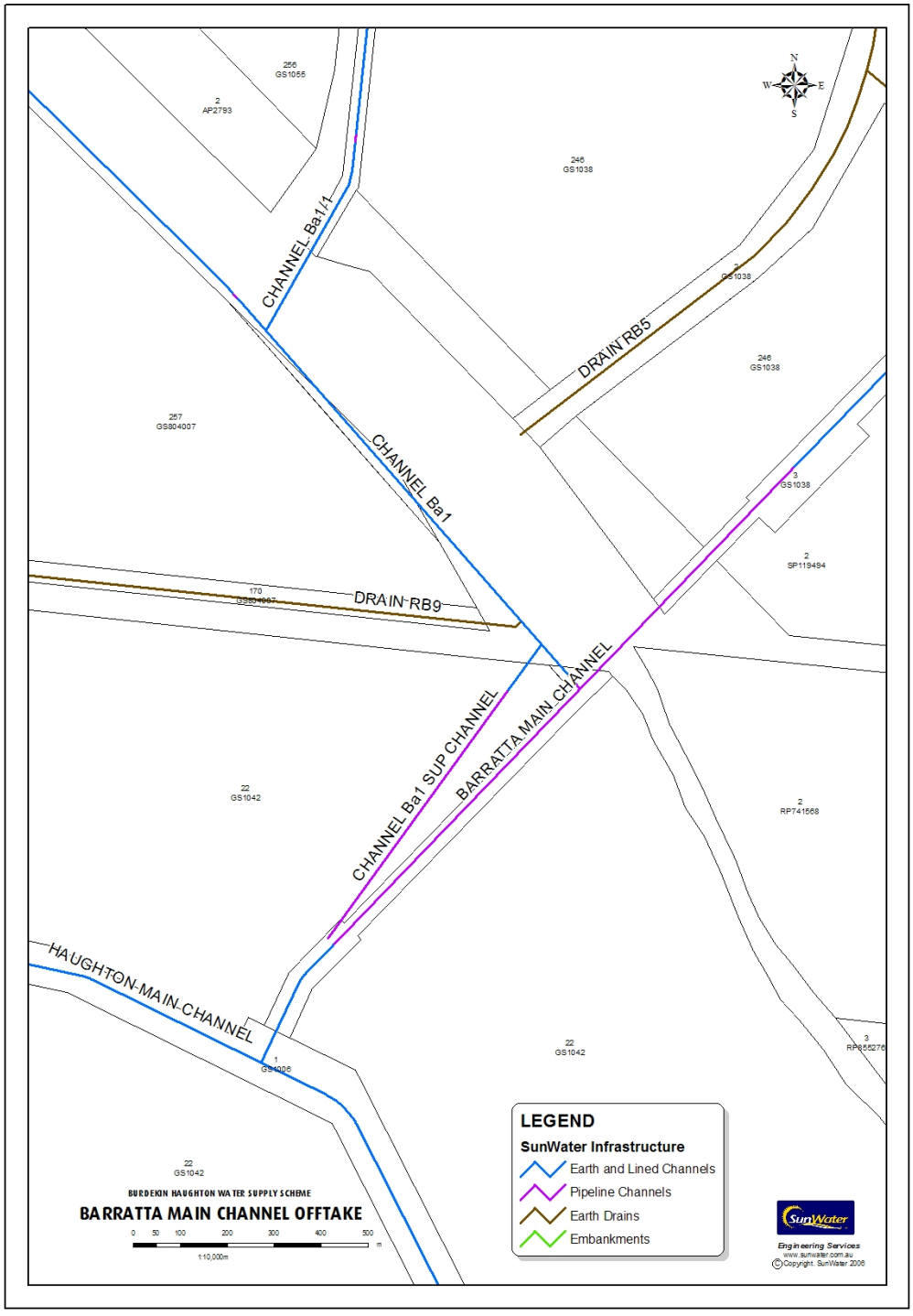

Figure 8.1 Barratta Main Channel offtake from Haughton Main Channel

After the inflows and seepage rates are determined, the Barratta system has 23 dedicated overflow structures. As mentioned in the recommendation section, these are used regularly due

to the float control regulation of the channel. Due to the size of these overflows, they could be able to be monitored by a new type ultrasonic meter that is installed into the end of the overflow outlet. With this technology, it may be possible to move this meter and check several or all site over a delivery cycle. By using this type of meter, a database of flows may be able to be achieved and the losses estimated using real captured data.

8.2 CONCLUSION

By using the above suggested framework for on going monitoring and planning, the future under gradates studying at SunWater will be able to detail the losses defined in this dissertation with more confidence that was able to done here. This leads to the Water Balance being a valuable tool in the day to day management of the overall scheme.

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APPENDIX A

PROJECT SPECIFICATION

University of Southern Queensland

FACULTY OF ENGINEERING AND SURVEYING

ENG 4111/4112 Research Project
PROJECT SPECIFICATION

FOR: Jeff Dann

TOPIC: Modernisation of an existing Irrigation Area

SUPERVISOR: Professor Rod Smith
Peter Marshall, Asset Engineering Manager, SunWater
Dan Coutts, Engineering Design Manager, SunWater

SPONSERSHIP: SunWater

PROJECT AIM: This project will look at how metering at critical locations can help identify losses in a distribution system and aid the development of methods to improve the efficiency of an existing Irrigation Scheme, through developing an accurate "Water Balance" model.

PROGRAMME: Issue B, 24th October 2009

1) Develop a "Water Balance" model of the irrigation scheme.
2) Review the methods for determining or estimating the losses from irrigation channel systems and the likely accuracies and uncertainties in these methods. Review will include the current designs for flow meters on open channels and end of system overflows. (multiple-path ultrasonic transit-time technique, Electromagnetic etc)
3) Compile the available data for the scheme to be analysed for the 'Water Balance'. Activities will include:
   - Divide areas of the scheme into a distribution network.
   - Compile water delivery data (pumped v's delivered) for each sub section.
   - Calculate the known losses ie evaporation
   - Estimate unknown losses ie seepage, metering accuracy, overflows, theft etc
4) Analyse the current distribution system with respect to making improvements.
   - Locate areas on main distribution laterals where metering could be provided
   - Create a map of distribution systems showing locations of critical locations for additional channel metering.
   - Locate locations on end of system open channels where overflow could be metered.
   - Identify areas of the system that data shows excessive water usage or inconclusive results etc.
5) Submit an academic dissertation on the research.

AGREED

_____(student) Date: 22/10/2009

_____(USQ Supervisor) Date: 29/10/2009

_____(Technical Advisor) Date: 27/10/2009

_____(Technical Advisor) Date: 27/10/2009

Examiner/Co-examiner: _____

APPENDIX B

SAMPLE PUMPED DATA

Date	Year	CLARE 'A' PUMPSTATION	CLARE 'B' PUMPSTATION	DALBEG 'A' PUMPSTATION	DALBEG 'B' PUMPSTATION	TOM FENWICK (HAUGHTON) PUMPSTATIONS	MILLAROO A PUMPSTATION	MILLAROO B PUMPSTATION
01/01/04	2004	6		0	0	708	24	0
02/01/04	2004			36	0	737	37	0
03/01/04	2004			69	0	854	71	0
04/01/04	2004		28	67	35	1,079	64	0
05/01/04	2004	32	71	68	43	1,050	145	0
06/01/04	2004	20	125	69	39	2,189	110	47
07/01/04	2004	21	124	69	83	1,870	187	29
08/01/04	2004	38	133	69	58	2,132	237	0
09/01/04	2004	39	142	66	60	2,318	150	0
10/01/04	2004			48	32	1,481	154	
11/01/04	2004			49		326		
12/01/04	2004	38	130	48		0		
13/01/04	2004			22		0		
14/01/04	2004			25	0	0		
15/01/04	2004				1	0	5	
16/01/04	2004					0		
17/01/04	2004			0	0			
18/01/04	2004				0			
19/01/04	2004				0	120	4	
20/01/04	2004			4	0	132		
21/01/04	2004				0	142		
22/01/04	2004					204		
23/01/04	2004					291		
24/01/04	2004		12			125		
25/01/04	2004	4	65			350		
26/01/04	2004	39	75			334		
27/01/04	2004	13	124			392		
28/01/04	2004	23	140	37		361		
29/01/04	2004	55	121	59	1	1,045	31	0
30/01/04	2004	81	127	48	50	1,760	42	1
31/01/04	2004		126	70	30	1,121	34	28
01/02/04	2004	61	123	66	69	1,530	36	32
02/02/04	2004	68	94	52	35	1,530	95	42
03/02/04	2004	29	28	50	26	1,081	78	4
04/02/04	2004			22	11		13	0
05/02/04	2004			14	0		3	
06/02/04	2004			0	0			
07/02/04	2004			0	0			
08/02/04	2004			0	0			
09/02/04	2004			0	0			
10/02/04	2004	4		14		169	22	
11/02/04	2004			0	0	6	28	
12/02/04	2004	5		0	0		3	
13/02/04	2004			0	0	4		
14/02/04	2004			0	0			
15/02/04	2004			0	0			
16/02/04	2004	2		0	0			
17/02/04	2004		6	0	0			
18/02/04	2004			11	0			
19/02/04	2004		19	26	0	308		
20/02/04	2004		11	51	0	335	34	
21/02/04	2004		47	71	0	354	67	
22/02/04	2004	31	46	78	42	1,201	100	

Date	Year	CLARE 'A' PUMPSTATION	CLARE 'B' PUMPSTATION	DALBEG 'A' PUMPSTATION	DALBEG 'B' PUMPSTATION	TOM FENWICK (HAUGHTON) PUMPSTATIONS	MILLAROO A PUMPSTATION	MILLAROO B PUMPSTATION
23/02/04	2004	114	118	79	79	862	169	
24/02/04	2004	115	124	84	91	2,051		86
25/02/04	2004	126	146	57	63	1,698	398	105
26/02/04	2004	124	142	74	73	2,198	182	87
27/02/04	2004	114	142	68	74	2,161	270	112
28/02/04	2004	79	99	37	73	1,184	86	72
29/02/04	2004	55	79	30	41	1,028	54	94
01/03/04	2004	60	68	57	38	1,344	103	64
02/03/04	2004	0	68	49	0	906	50	30
03/03/04	2004	69	50	30	0	1,166	96	2
04/03/04	2004	75	50	14	0	1,068	51	0
05/03/04	2004	55	119	37	0	1,151	101	31
06/03/04	2004	57	132	41	0	1,166	93	32
07/03/04	2004	80	89	57	0	1,123	71	35
08/03/04	2004	47	126	71	36	1,239	167	58
09/03/04	2004	114	130	78	72	1,556	157	64
10/03/04	2004	113	129	61	75	2,168	221	82
11/03/04	2004	97	91	70	73	1,489	94	49
12/03/04	2004	59	68	69	72	1,896	128	79
13/03/04	2004	68	60	68	71	463	108	48
14/03/04	2004	59	50	59	72	824	108	62
15/03/04	2004	40	49	57	71	568	72	62
16/03/04	2004	45	49	40	71	762	89	0
17/03/04	2004	58	52	39	40	920	90	0
18/03/04	2004	53	44	51	0	894	104	0
19/03/04	2004	30	84	53	0	879	116	0
20/03/04	2004	27	52	70	0	933	43	0
21/03/04	2004	20	90	69	0	652	34	0
22/03/04	2004	26	93	46	0	655	90	0
23/03/04	2004	87	125	67	38	1,079		25
24/03/04	2004	118	125	67	76	1,540		63
25/03/04	2004	36	178	69	70	1,936		64
26/03/04	2004	83	118	45	59	1,937		68
27/03/04	2004	126	103	65	72	1,385		69
28/03/04	2004	83	81	64	73	1,153		65
29/03/04	2004	69	84	50	73	986		63
30/03/04	2004	24	72	47	71	1,140		
31/03/04	2004	16	50	36	73	831	139	
01/04/04	2004	30	49	55	71	885	189	32
02/04/04	2004	32	67	60	54	988	149	0
03/04/04	2004	46	67	54	90	1,178	174	0
04/04/04	2004	30	47	48	38	1,273	132	0
05/04/04	2004	16	98	47	35	953	137	0
06/04/04	2004	56	116	55	34	1,213	151	28
07/04/04	2004	73	111	40	49	1,214	103	37
08/04/04	2004	50	135	71	37	1,239	187	66
09/04/04	2004	95	98	49	38	1,646	177	95
10/04/04	2004	94	89	58	37	1,227	108	66
11/04/04	2004	59	71	58	40	906	114	41
12/04/04	2004	44	84	41	38	1,011	64	32
13/04/04	2004	74	74	22	36	805	54	34
14/04/04	2004	57	102	32	9	1,035	93	32
15/04/04	2004	39	88	54	0	1,176	49	36

Date	Year	CLARE 'A' PUMPSTATION	CLARE 'B' PUMPSTATION	DALBEG 'A' PUMPSTATION	DALBEG 'B' PUMPSTATION	TOM FENWICK (HAUGHTON) PUMPSTATIONS	MILLAROO A PUMPSTATION	MILLAROO B PUMPSTATION
16/04/04	2004	58	68	54	70	1,191	102	32
17/04/04	2004	53	49	70	74	1,247	84	32
18/04/04	2004	71	49	47	71	1,598	116	34
19/04/04	2004	60	53	35	73	1,273	102	32
20/04/04	2004	81	67	35	73	1,121	99	33
21/04/04	2004	67	62	33	36	1,555	129	59
22/04/04	2004	88	146	43	35	1,356	178	69
23/04/04	2004	74	63	62	46	1,515	92	128
24/04/04	2004	49	93	46	37	1,213	113	65
25/04/04	2004	61	80	43	35	956	72	0
26/04/04	2004	21	58	42	31	245	93	0
27/04/04	2004	0	2	36	35	37	40	0
28/04/04	2004	2	0	23	1	62	31	6
29/04/04	2004	0	0	12	0	40	34	0
30/04/04	2004	0	8	4	0	7	33	0
01/05/04	2004	0	0	1	0	27	0	0
02/05/04	2004	3	0	1	0	0	26	0
03/05/04	2004	19	20	1	0	117	35	0
04/05/04	2004	2	13	0	0	2	35	0
05/05/04	2004	0	16	9	0	1	35	0
06/05/04	2004	0	45	36	0	208	77	0
07/05/04	2004	0	45	34	0	313	100	0
08/05/04	2004	5	48	58	0	415	46	0
09/05/04	2004	0	49	58	0	318	91	0
10/05/04	2004	8	49	47	0	492	43	0
11/05/04	2004	49	79	42	0	298	74	29
12/05/04	2004	52	97	26	0	889	73	33
13/05/04	2004	38	92	22	0	815	33	8
14/05/04	2004	71	94	18	0	762	126	50
15/05/04	2004	48	94	34	0	1,131	132	33
16/05/04	2004	47	94	48	0	862	72	33
17/05/04	2004	59	80	76	0	850	129	0
18/05/04	2004	71	115	45	26	767	102	0
19/05/04	2004	73	98		36	976		23
20/05/04	2004	58	73	70	27	1,008	204	23
21/05/04	2004	53	69	70	36	1,309	53	33
22/05/04	2004	43	52	87	43	959	45	34
23/05/04	2004	17	30	36	27	641	47	30
24/05/04	2004	14	31	50	35	327	45	0
25/05/04	2004	14	43	73	0	662	35	0
26/05/04	2004	14	49	69	0	577	37	1
27/05/04	2004	30	43	19	0	576	35	33
28/05/04	2004	13	45	28	0	796	34	34
29/05/04	2004	21	48	11	0	579	88	0
30/05/04	2004	34	30	12	0	609	0	0
31/05/04	2004	23	30	13	0	462	0	0
01/06/04	2004	16	19	22	0	414	35	0
02/06/04	2004	12	18	37	0	382	79	0
03/06/04	2004	25	17	41	0	653	92	0
04/06/04	2004	27	20	36	0	925	73	0
05/06/04	2004	13	28	47	0	1,101	120	0
06/06/04	2004	14	32	23	38	985	100	0
07/06/04	2004	44	58	60	36	801	115	0

Date	Year	CLARE 'A' PUMPSTATION	CLARE 'B' PUMPSTATION	DALBEG 'A' PUMPSTATION	DALBEG 'B' PUMPSTATION	TOM FENWICK (HAUGHTON) PUMPSTATIONS	MILLAROO A PUMPSTATION	MILLAROO B PUMPSTATION
08/06/04	2004		81	66	34	833	112	0
09/06/04	2004	95	94	93	36	1,131	102	14
10/06/04	2004	81	90	49	35	733	123	73
11/06/04	2004	101	77	73	37	563	122	59
12/06/04	2004	69	55	70	35	610	102	56
13/06/04	2004	42	45	69	34	836	86	0
14/06/04	2004		30	36	36	818	0	0
15/06/04	2004			3	0		0	0
16/06/04	2004			0	0		0	0
17/06/04	2004			0	0		0	0
18/06/04	2004	0		0	0		0	0
19/06/04	2004	9		12	0		0	0
20/06/04	2004			12	0		41	0
21/06/04	2004			2	0		0	0
22/06/04	2004			0	0		0	0
23/06/04	2004	0		1		709	0	0
24/06/04	2004			0	0		0	0
25/06/04	2004			0	0		0	0
26/06/04	2004	1	149	0	0		0	0
27/06/04	2004	0	17	0	0		130	0
28/06/04	2004	13	30	37	0	2,275	164	66
29/06/04	2004	42	75	38	0	993	139	66
30/06/04	2004	28	101	39	0	1,519	115	33
01/07/04	2004	60	85	47	0	1,125	153	28
02/07/04	2004	44	102	45	0	1,398	97	33
03/07/04	2004	45	99	38	36	1,246	93	33
04/07/04	2004	30	60	38	36	994	92	33
05/07/04	2004	16	78	35	36	810	92	8
06/07/04	2004	9	75	58	36	937	34	0
07/07/04	2004	0	72	55	33	519	88	0
08/07/04	2004	0	85	55	39	868	34	0
09/07/04	2004	0	75	55	33	829	99	0
10/07/04	2004	12	45	34	36	591	35	0
11/07/04	2004	17	45	23	34	618	118	2
12/07/04	2004	15	45	13	37	620	48	0
13/07/04	2004	7	45	23	0	493	53	0
14/07/04	2004	22	30	25	0	813	93	0
15/07/04	2004	24	30	36	34	600	93	0
16/07/04	2004	31	30	38	33	738	85	0
17/07/04	2004	24	30	37	36	374	94	0
18/07/04	2004	15	31	48	10	393	60	0
19/07/04	2004	0	32	35	0	474	55	0
20/07/04	2004	0	28	39	0	668	30	0
21/07/04	2004	10	30	58	0	882	85	0
22/07/04	2004	18	31	40	0	680	57	69
23/07/04	2004	26	28	38	0	577	92	3
24/07/04	2004	2	30	38	0	559	79	0
25/07/04	2004	21	40	23	0	611	68	0
26/07/04	2004	30	47	62	0	630	77	0
27/07/04	2004	37	33	57	0	539	90	0
28/07/04	2004	57	30	45	0	636	88	0
29/07/04	2004	48	30	64	0	678	117	0
30/07/04	2004	58	30	45	0	484	101	0

Date	Year	CLARE 'A' PUMPSTATION	CLARE 'B' PUMPSTATION	DALBEG 'A' PUMPSTATION	DALBEG 'B' PUMPSTATION	TOM FENWICK (HAUGHTON) PUMPSTATIONS	MILLAROO A PUMPSTATION	MILLAROO B PUMPSTATION
31/07/04	2004	28	30	60	0	522	90	0
01/08/04	2004	75	20	61	0	488	68	0
02/08/04	2004	60	20	49	0	479	40	0
03/08/04	2004	13	30	39	0	485	84	0
04/08/04	2004	20	30	38	1	640	79	0
05/08/04	2004	34	51	31	0	786	34	0
06/08/04	2004	21	54	23	0	732	74	0
07/08/04	2004	0	47	38	0	745	43	0
08/08/04	2004	0	52	38	0	650	35	0
09/08/04	2004	0	51	39	0	660	54	0
10/08/04	2004	0	51	38	0	737	52	0
11/08/04	2004	0	50	23	0	577	113	0
12/08/04	2004	0	51	23	0	725	25	0
13/08/04	2004	0	51	24	0	816	106	0
14/08/04	2004	8	53	26	0	518	55	0
15/08/04	2004	22	33	21	0	757	90	0
16/08/04	2004	25	33	23	0	451	120	0
17/08/04	2004	25	30	27	0	604	58	0
18/08/04	2004	37	33	24	0	651	93	0
19/08/04	2004	40	33	49	0	866	88	0
20/08/04	2004	6	33	49	0	731	35	0
21/08/04	2004	40	35	33	0	668	84	0
22/08/04	2004	45	35	23	0	684	38	0
23/08/04	2004	36	30	38	0	720	35	0
24/08/04	2004	40	33	0	0	567	33	0
25/08/04	2004	38	33	55	50	1,032	53	0
26/08/04	2004	59	33	91	28	1,016	76	0
27/08/04	2004	40	50	48	38	723	37	0
28/08/04	2004	35	33	24	37	685	72	0
29/08/04	2004	25	33	48	0	583	37	0
30/08/04	2004	25	33	39	0	420	38	0
31/08/04	2004	11	35	61	0	402	85	0
01/09/04	2004	3	45	59	0	816	92	0
02/09/04	2004	23	45	57	0	1,029	76	0
03/09/04	2004	24	45	60	0	921	93	0
04/09/04	2004	22	45	49	0	640	65	0
05/09/04	2004	25	45	50	0	396	53	0
06/09/04	2004	24	30	50	0	658	35	0
07/09/04	2004	40	30	61	0	777	34	0
08/09/04	2004	29	34	60	0	504	56	0
09/09/04	2004	23	26	58	0	591	95	0
10/09/04	2004	30	45	36	0	612	47	0
11/09/04	2004	32	45	29	0	532	95	0
12/09/04	2004	40	30	50	0	510	52	0
13/09/04	2004	24	31	74	0	620	96	0
14/09/04	2004	26		43	0	779	61	0
15/09/04	2004	24	88	33	0	520	107	0
16/09/04	2004	27	45	24	0	780	69	0
17/09/04	2004	24	45	24	0	1,063	130	0
18/09/04	2004	26	47	17	0	865	91	0
19/09/04	2004	37	43	23	0	851	92	0
20/09/04	2004	40	45	24	0	1,008	95	0
21/09/04	2004	45	45	61	0	851	94	0

Date	Year	CLARE 'A' PUMPSTATION	CLARE 'B' PUMPSTATION	DALBEG 'A' PUMPSTATION	DALBEG 'B' PUMPSTATION	TOM FENWICK (HAUGHTON) PUMPSTATIONS	MILLAROO A PUMPSTATION	MILLAROO B PUMPSTATION
22/09/04	2004	37	45	60	0	943	97	0
23/09/04	2004	32	61	60	0	667	89	0
24/09/04	2004	21	63	58	0	1,081	90	0
25/09/04	2004	22	0	48	0	938	107	0
26/09/04	2004	24	123	51	0	994	95	0
27/09/04	2004	27	45	60	0	1,013	89	0
28/09/04	2004	22	51	60	0	890	107	0
29/09/04	2004	22	39	59	0	1,220	117	0
30/09/04	2004	41	43	37	39	710	120	0
01/10/04	2004	60	69	35	31	1,226	69	0
02/10/04	2004	61	67	24	36	1,067	91	0
03/10/04	2004	58	45	24	35	1,026	43	0
04/10/04	2004	102	47	25	37	1,031	75	0
05/10/04	2004	0	43	35	40	957	34	0
06/10/04	2004	42	47	39	36	1,205	46	7
07/10/04	2004	38	63	40	35	1,028	61	0
08/10/04	2004	40	61	25	48	975	38	0
09/10/04	2004	38	63	50	0	1,173	90	0
10/10/04	2004	34	63	36	0	1,051	92	33
11/10/04	2004	40	64	38	0	1,123	90	32
12/10/04	2004	65	74	52	0	979	90	32
13/10/04	2004	53	63	72	0	1,155	90	0
14/10/04	2004	48	43	87	0	931	83	0
15/10/04	2004	70	45	54	0	1,241	140	0
16/10/04	2004	34	75	68	0	1,543	75	0
17/10/04	2004	40	82	70	0	1,029	91	0
18/10/04	2004	38	69	75	0	1,028	125	0
19/10/04	2004	27	75	57	35	1,398	113	30
20/10/04	2004	5	65	47	42	692	42	8
21/10/04	2004	28	58	27	28	1,383	0	0
22/10/04	2004	26	60	44	10	944	35	0
23/10/04	2004	18	41	38	0	1,225	36	0
24/10/04	2004	40	30	39	0	1,148	90	0
25/10/04	2004	45	30	40	0	1,349	60	0
26/10/04	2004	53	51	39	0	860	73	0
27/10/04	2004	47	67	38	0	1,306	80	0
28/10/04	2004	62	91	60	0	1,235	119	0
29/10/04	2004	57	79	60	0	1,301	81	0
30/10/04	2004	67	79	71	0	1,416	117	0
31/10/04	2004	61	79	24	36	1,129	118	0
01/11/04	2004	73	95	25	38	1,334	126	0
02/11/04	2004	43	77	36	0	1,292	97	0
03/11/04	2004	45	71	55	0	1,157	160	0
04/11/04	2004	52	67	51	0	1,427	90	0
05/11/04	2004	40	67	38	0	1,065	119	0
06/11/04	2004	48	70	51	0	1,502	216	0
07/11/04	2004	40	62	39	41	1,272	125	0
08/11/04	2004	33	67	39	38	1,087	103	0
09/11/04	2004	64	67	25	35	1,205	223	0
10/11/04	2004	100	83	24	37	1,561	113	0
11/11/04	2004	102	96	28	26	1,727	165	0
12/11/04	2004	74	83	58	8	1,603	201	0
13/11/04	2004	93	92	50	72	1,902	125	66

Date	Year	CLARE 'A' PUMPSTATION	CLARE 'B' PUMPSTATION	DALBEG 'A' PUMPSTATION	DALBEG 'B' PUMPSTATION	TOM FENWICK (HAUGHTON) PUMPSTATIONS	MILLAROO A PUMPSTATION	MILLAROO B PUMPSTATION
14/11/04	2004	98	100	69	70	1,504	127	64
15/11/04	2004	106	103	78	36	1,141	106	66
16/11/04	2004	99	89	62	73	1,250	87	44
17/11/04	2004	90	108	73	71	1,700	124	30
18/11/04	2004	103	113	68	70	1,597	155	25
19/11/04	2004	83	94	65	69	2,149	185	36
20/11/04	2004	108	67	38	68	1,536	125	28
21/11/04	2004	55	79	48	74	968	119	34
22/11/04	2004	60	68	24	66	1,582	107	33
23/11/04	2004	70	47	40	37	1,587	116	78
24/11/04	2004	105	43	24	34	1,699	129	28
25/11/04	2004	75	51	26	0	1,763	125	33
26/11/04	2004	72	70	25	0	1,686	67	34
27/11/04	2004	63	82	16	0	1,291	181	4
28/11/04	2004	44	117	23	0	1,620	67	0
29/11/04	2004	51	74	4	0	1,220	134	0
30/11/04	2004	39	76	38	0	1,398	95	0
01/12/04	2004	110	97	39	0	1,852	166	0
02/12/04	2004	91	94	32	33	2,164	126	0
03/12/04	2004	104	73	38	39	1,551	150	32
04/12/04	2004	102		70	69	1,571	96	32
05/12/04	2004	38	140	72	70	1,823	254	0
06/12/04	2004	60	81	70	70	2,135	54	0
07/12/04	2004	92	87	68	80	1,533	188	35
08/12/04	2004	88	94	61	59	1,760	123	35
09/12/04	2004	102	94	64	45	1,235	90	35
10/12/04	2004	103	107	58	37	1,485	51	0
11/12/04	2004	33	53	43	0	264	25	0
12/12/04	2004	5	47	26	0	126	0	0
13/12/04	2004	0	53	0	0	126	0	0
14/12/04	2004	2	55	9	0	142	0	0
15/12/04	2004	12	41	18	0	348	77	0
16/12/04	2004	16	72	11	0	668	46	0
17/12/04	2004	0	82	12	0	927	85	0
18/12/04	2004	63	0	13	0	1,198	113	0
19/12/04	2004	169	0	12	0	1,524	20	0
20/12/04	2004	140	4	24	0	2,084	95	0
21/12/04	2004	140	51	57	0	1,935	173	0
22/12/04	2004	81	79	58	0	2,449	164	0
23/12/04	2004	130	77	71	37	1,333	130	0
24/12/04	2004	126	100	58	37	2,010	232	2
25/12/04	2004	81	108	67	37	1,960	65	2
26/12/04	2004	62	94	59	37	1,506	122	30
27/12/04	2004	68	80	59	50	1,304	119	100
28/12/04	2004	76	93	37	35	559	244	100
29/12/04	2004	86	79	38	36	914	85	100
30/12/04	2004	70	98	43	8	1,339	141	100

APPENDIX C

SAMPLE CUSTOMER METER DATA

Effective Date	Year	Offtake Number	Volume	Operational System	Operational Section	ROL Zone	Billing Group
1-Jul-04	2004	BMP34W1	0	Barratta	Barratta	Burdekin River 64km - 58km	BH Channel
1-Jul-04	2004	BM243W2	0	Barratta	Barratta	Burdekin River 64km - 58km	BH Channel
1-Jul-04	2004	BM241R1	0	Barratta	BMC REG 18	Burdekin River 64km - 58km	BH Channel
1-Jul-04	2004	CA045W1	0	Clare	CAMC below A4 offtake	D/S of Clare Weir	BH Channel
1-Jul-04	2004	35617	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
1-Jul-04	2004	HH013R1	0	Haughton	H10 Reg 100	Burdekin River 64km - 58km	BH Channel
1-Jul-04	2004	39995	0	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
2-Jul-04	2004	49007	0	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
8-Jul-04	2004		5.69	Dalbeg			
15-Jul-04	2004		5.236	Giru Benefited Area			
20-Jul-04	2004	MA021W1	50.4	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
21-Jul-04	2004	CA091W1	0.016	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
21-Jul-04	2004	CA109W1	0.062	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
21-Jul-04	2004	CA109W2	0.004	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
21-Jul-04	2004	CA108W1	28.188	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
21-Jul-04	2004	CA092W2	0.107	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
21-Jul-04	2004	CA110W2	3.625	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
21-Jul-04	2004	CA110W1	8.742	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
21-Jul-04	2004	CA110W3	2.527	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
21-Jul-04	2004	BM283W1	88.5	Barratta	REG46 109ML	Burdekin River 64km - 58km	BH Channel
22-Jul-04	2004	CA099W2	0.125	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
22-Jul-04	2004	CA035W2	2.373	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
22-Jul-04	2004	CA107W1	0.012	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
22-Jul-04	2004	CA107W2	1.672	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
22-Jul-04	2004	CA107W3	0	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
22-Jul-04	2004	CA106W1	0.586	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
22-Jul-04	2004	CA105W1	0	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
22-Jul-04	2004	CA103W1	17.772	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
22-Jul-04	2004	CA100W1	15.467	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
22-Jul-04	2004	CA101W1	7.297	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
22-Jul-04	2004	CA095W2	6.258	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
22-Jul-04	2004	CA134W1(CA097W3 on Streamline)	2.766	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
22-Jul-04	2004	CA104W1	0	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
22-Jul-04	2004	CA102W1	44.996	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
22-Jul-04	2004	CA041W1	13.679	Clare	Check 38 to CAMC Overflow	D/S of Clare Weir	BH Channel
22-Jul-04	2004	DB028W1	6.4	Dalbeg	DBCH 2	Burdekin Falls Dam & Burdekin River	BH Channel
23-Jul-04	2004	CA127W1	0	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
23-Jul-04	2004	CA203W1	10.477	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
23-Jul-04	2004	CA125W1	8.953	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
23-Jul-04	2004	CA136W1	0	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
23-Jul-04	2004	CA204W1	9.211	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
23-Jul-04	2004	CA202W1	7.344	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
23-Jul-04	2004	CA206W1	3.992	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
23-Jul-04	2004	CA126W1	0	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
23-Jul-04	2004	CA119W1	26.656	Clare	A4/2 to A4/2/1 offtake	D/S of Clare Weir	BH Channel
23-Jul-04	2004	CA120W1	34.672	Clare	A4/2 to A4/2/1 offtake	D/S of Clare Weir	BH Channel
23-Jul-04	2004	BJ080W1	37.938	Barratta	BMC REG 33	Burdekin River 64km - 58km	BH Channel
23-Jul-04	2004	EL049W1	0.063	Elliot	E1 Channel.	Burdekin River 58km - 50.3km	BH Channel
24-Jul-04	2004	CA105W2	15.657	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
24-Jul-04	2004		0.634	Dalbeg			
24-Jul-04	2004		2.22	Dalbeg			
24-Jul-04	2004		0.46	Dalbeg			
27-Jul-04	2004	CA121W1	17.781	Clare	A4/2 to A4/2/1 offtake	D/S of Clare Weir	BH Channel
27-Jul-04	2004	BM246R1	0	Barratta	BA1/1 OFFTAKE	Burdekin River 64km - 58km	BH Channel
29-Jul-04	2004	CB063W1	0.01	Clare	CHECK61	Burdekin River 58km - 50.3km	BH Channel

Effective Date	Year	Offtake Number	Volume	Operational System	Operational Section	ROL Zone	Billing Group
29-Jul-04	2004	BJ062W4	52.73	Barratta	Regulator 79	Burdekin River 64km - 58km	BH Channel
30-Jul-04	2004	BJ062W2	35.5	Barratta	Regulator 79	Burdekin River 64km - 58km	BH Channel
31-Jul-04	2004	100870	41.485	Townsville Thuringowa Pipeline	(obsolete) Townsville Thuringowa Pipeline	Burdekin River 64km - 58km	BH Commercial (NQ Water)
31-Jul-04	2004	ROCKS	3549	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Jul-04	2004	PC NO. 2	9110	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Jul-04	2004	RITA ISLAND	976	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Jul-04	2004	RONCATO	0	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Jul-04	2004	Riparian	0	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Jul-04	2004	Warrens Gully	417	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Jul-04	2004	MCDOWELLS PUMP 1	2183	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Jul-04	2004	D/River	444	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Jul-04	2004	RIPARIAN - SOUTH	0	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Jul-04	2004	MCDOWELLS PUMP 2	0	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Jul-04	2004	MCDOWELLS PUMP 3	2166	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
1-Aug-04	2004	MCDOWELLS PUMP 2	0	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
5-Aug-04	2004	MCDOWELLS PUMP 1	283	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
6-Aug-04	2004	MCDOWELLS PUMP 1	264	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
10-Aug-04	2004		3.3	Giru Benefited Area			
11-Aug-04	2004	DB031W2OBSOLETE	0.17	Dalbeg	CHECK 28	Burdekin Falls Dam & Burdekin River	BH Channel
11-Aug-04	2004	DB039W1	21.05	Dalbeg	CHECK 28	Burdekin Falls Dam & Burdekin River	BH Channel
11-Aug-04	2004	DB030W2OBSOLETE	11.7	Dalbeg	CHECK 28	Burdekin Falls Dam & Burdekin River	BH Channel
11-Aug-04	2004	DB039W2OBSOLETE	18.48	Dalbeg	CHECK 28	Burdekin Falls Dam & Burdekin River	BH Channel
11-Aug-04	2004	DB023W1	5.4	Dalbeg	DBCH 2	Burdekin Falls Dam & Burdekin River	BH Channel
11-Aug-04	2004	DB023W2	10.48	Dalbeg	DBCH 2	Burdekin Falls Dam & Burdekin River	BH Channel
11-Aug-04	2004	DB019W1	10.38	Dalbeg	DBCH 2	Burdekin Falls Dam & Burdekin River	BH Channel
11-Aug-04	2004	DB022W1	0	Dalbeg	DBCH 2	Burdekin Falls Dam & Burdekin River	BH Channel
11-Aug-04	2004	DB022W2	0.08	Dalbeg	DBCH 2	Burdekin Falls Dam & Burdekin River	BH Channel
19-Aug-04	2004	DB018W1	5.72	Dalbeg	Check 18	Burdekin Falls Dam & Burdekin River	BH Channel
19-Aug-04	2004	DB018W1	18	Dalbeg	Check 18	Burdekin Falls Dam & Burdekin River	BH Channel
23-Aug-04	2004	DA020W1	16.23	Dalbeg	CHECK 9	Burdekin Falls Dam & Burdekin River	BH Channel
26-Aug-04	2004	DB074W1	0	Dalbeg	Channel 2/6 offtake	Burdekin Falls Dam & Burdekin River	BH Channel
26-Aug-04	2004	DB040W1	25.85	Dalbeg	Channel 2/6 offtake	Burdekin Falls Dam & Burdekin River	BH Channel
26-Aug-04	2004	DB082W1	7.83	Dalbeg	Channel 2/6 offtake	Burdekin Falls Dam & Burdekin River	BH Channel
26-Aug-04	2004	DB031W1	0	Dalbeg	CHECK 28	Burdekin Falls Dam & Burdekin River	BH Channel
26-Aug-04	2004	DB030W1	11.08	Dalbeg	CHECK 28	Burdekin Falls Dam & Burdekin River	BH Channel
26-Aug-04	2004	DB029W1	5.69	Dalbeg	CHECK 28	Burdekin Falls Dam & Burdekin River	BH Channel
26-Aug-04	2004	100870	36.771	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (NQ Water)
31-Aug-04	2004	RIPARIAN - SOUTH	0	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Aug-04	2004	MCDOWELLS PUMP 3	1827	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Aug-04	2004	MCDOWELLS PUMP 2	1596	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Aug-04	2004	ROCKS	3438	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Aug-04	2004	PC NO. 2	6769	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Aug-04	2004	RITA ISLAND	634	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Aug-04	2004	RONCATO	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Aug-04	2004	Riparian	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Aug-04	2004	Warrens Gully	2160	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Aug-04	2004	D/River	362	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Aug-04	2004	MCDOWELLS PUMP 1	30	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
6-Sep-04	2004	DB073W1	65	Dalbeg	DB CH 3	Burdekin Falls Dam & Burdekin River	BH Channel
6-Sep-04	2004	DB093W1	21.77	Dalbeg	DB CH5	Burdekin Falls Dam & Burdekin River	BH Channel
6-Sep-04	2004	DB093W1	0	Dalbeg	DB CH5	Burdekin Falls Dam & Burdekin River	BH Channel
6-Sep-04	2004	MB061W1	63.055	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Channel
9-Sep-04	2004	58116	3.66	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Sep-04	2004	MA125W1	0	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
22-Sep-04	2004	MA125W2	63.034	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel

Effective Date	Year	Offtake Number	Volume	Operational System	Operational Section	ROL Zone	Billing Group
22-Sep-04	2004	MA126W1	1.177	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
23-Sep-04	2004	96702	0.184	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
23-Sep-04	2004	MA120W1	9.98	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
23-Sep-04	2004	MA122W1	11.442	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
23-Sep-04	2004	MA017W1	9.96	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
23-Sep-04	2004	MA121W1	3.18	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
23-Sep-04	2004	MA119W1	14.405	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
23-Sep-04	2004	MA123W1	14.35	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
23-Sep-04	2004	MA016W1	64.048	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
23-Sep-04	2004	MA015W1	36.208	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
23-Sep-04	2004	Por 51V ROKEBY	0.281	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
23-Sep-04	2004	Lot 2 RP743439 ROKEBY	0.004	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
23-Sep-04	2004	LOT 4 & 7 SP105681 WOODSTOCK	0.463	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
23-Sep-04	2004	LOT 2 EP782 WOODSTOCK	0.349	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
23-Sep-04	2004	LOT 2 SP146640 WOODSTOCK	9.94	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
23-Sep-04	2004	Lot 3 RP808101	4.162	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
23-Sep-04	2004	Lot 1,2 RP735155 ROKEBY	0	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
23-Sep-04	2004	Lot 1 RP735157 ROKEBY	0	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
23-Sep-04	2004	Por 35V ROKEBY	0	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
23-Sep-04	2004	L 7,11,12 RP708664 MAGENTA	0	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
23-Sep-04	2004	LOT 1 RP712300 WOODSTOCK	1.632	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
23-Sep-04	2004	Lot 1 RP744370 WOODSTOCK	0.245	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
24-Sep-04	2004	HS057W1	69.81	Haughton	H16 REG 82 55ML	Burdekin River 64km - 58km	BH Channel
24-Sep-04	2004	MA124W1	28.012	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	BN047R1	23.75	Barratta	BA 5/2 REG 70 26ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN047W1OBSOLETS	0	Barratta	BA 5/2 REG 70 26ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN046W1	38.57	Barratta	BA 5/2 REG 70 26ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN045R1	320.8	Barratta	BA 5/2 REG 70 26ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN17W9	49.75	Barratta	BA5 REG 60 198 ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN17W8	53.25	Barratta	BA5 REG 60 198 ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN030W1	211.71	Barratta	BA5/1 OFFTAKE	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN052R1	98.61	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN051W3	15.31	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN051W2	0	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN051W1	15.29	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN055R1	86.56	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN054W1	78.68	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN054R2	54.38	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN053W1	131.78	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN048W3	135.41	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN048W2	146.86	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN048W1	19.06	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN049R1	0.01	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN046R1	118.37	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN144R2	193.56	Barratta	Barratta	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN144R1	90.76	Barratta	Barratta	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN055W1	65.69	Barratta	Barratta	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM246R2	31.76	Barratta	Barratta	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM244R2	85.39	Barratta	BARRATTA MAIN (Butterfly valve)	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM246R3	76.36	Barratta	BARRATTA MAIN (Butterfly valve)	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM244R1	80.12	Barratta	BMC Reg 16	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM244W1	175.12	Barratta	BMC Reg 16	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM243W1	198.61	Barratta	BMC Reg 16	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM242W1	253.42	Barratta	BMC REG 18	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM240W1	111.54	Barratta	BMC REG 18	Burdekin River 64km - 58km	BH Channel

Effective Date	Year	Offtake Number	Volume	Operational System	Operational Section	ROL Zone	Billing Group
27-Sep-04	2004	BM240R1OBSOLETE	0	Barratta	BMC REG 19	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM240W2	27.21	Barratta	BMC REG 19	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM240R2	10.42	Barratta	BMC REG 19	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM278W1	246.78	Barratta	BMC REG 20	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM142W1	9.31	Barratta	BMC REG 20	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM276W1	240.69	Barratta	BMC REG 20	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM140W1	69.53	Barratta	BMC REG 20	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM275W2	31.54	Barratta	BMC REG 20	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM275W1	91.92	Barratta	BMC REG 20	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM277W1	170.28	Barratta	BMC REG 20	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM211W1	22.61	Barratta	BMC REG 20	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM284W1	242.4	Barratta	BMC REG 21	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM141W1	19.63	Barratta	BMC REG 21	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN17W1	93.24	Barratta	BMC REG 22	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM193W3	39.08	Barratta	BMC REG 22	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM193W2	96.05	Barratta	BMC REG 22	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BM193R2	102.1	Barratta	BMC REG 22	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN17W3	57.34	Barratta	BMC REG 23	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN17W2	65.13	Barratta	BMC REG 23	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN004R1	23.33	Barratta	BMC REG 23	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN004R2OBSOLETE	0	Barratta	BMC REG 23	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	55086	137.07	Burdekin River & Burdekin Falls Dam	Burdekin River from Elliot Pump Station to Clare Weir	Burdekin River 58km - 50.3km	BH River
27-Sep-04	2004	MA023W2	0	Millaroo	Channel 2 Reg 104	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA024W2	0.99	Millaroo	Channel 2 Reg 104	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA210R1	0	Millaroo	Channel 2 Reg 104	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA025W2	0.9	Millaroo	Channel 2 Reg 104	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA026W2	0	Millaroo	Channel 2 Reg 104	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA211W1	44.22	Millaroo	Channel 2 Reg 104	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA212W1	55.72	Millaroo	Channel 2 Reg 104	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	BM101W1	3.92	Clare	Clare	D/S of Clare Weir	BH Channel
27-Sep-04	2004	EL046W1	79.69	Elliot	E1 Channel.	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL047W2	14.45	Elliot	E1 Channel.	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL047W1	0.26	Elliot	E1 Channel.	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL049W1	33.376	Elliot	E1 Channel.	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL102W1	47.37	Elliot	E1/1 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL056W1	143.84	Elliot	E2 Pipeline Offtake	Burdekin River 64km - 58km	z (obsolete) BH Commercial (Leased Customers)
27-Sep-04	2004	EL059R2	109.31	Elliot	Elliot	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL059R1	263.18	Elliot	Elliot	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL109R1	35.18	Elliot	Elliot Main Control Valve	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL043W1	95.54	Elliot	Gate 56	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL042W1	303.28	Elliot	Gate 57	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL043W2	102.62	Elliot	Gate 57	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	BM032W1	49.27	Haughton	GLADDYS LAGOON OFFTAKE	Burdekin River 64km - 58km	z (obsolete) BH Commercial (Ross)
27-Sep-04	2004	HH048W1	125.66	Haughton	H10	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH052W1	115.33	Haughton	H10	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH010W1	109.03	Haughton	H10	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH020R1	278.44	Haughton	H10	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH054W1	153.17	Haughton	H10	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH011W1	226.71	Haughton	H10	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH046R1	238.36	Haughton	H10 OFFTAKE	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH050W1	240.25	Haughton	H10 Reg 100	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH012R2	0	Haughton	H10 Reg 100	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH012R1	278.81	Haughton	H10 Reg 100	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH057R1	101.63	Haughton	H10 Reg 100	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH048R1	66.97	Haughton	H10 Reg 99	Burdekin River 64km - 58km	BH Channel

Effective Date	Year	Offtake Number	Volume	Operational System	Operational Section	ROL Zone	Billing Group
27-Sep-04	2004	HH049W1	263.56	Haughton	H10 Reg 99	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH044W1	324.27	Haughton	H10/1	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH047R1	136.31	Haughton	H10/1	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH056W1	169.85	Haughton	H10/2	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH055W1	13.75	Haughton	H10/2	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH051R1	47.02	Haughton	H10/3	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH051W1	45.67	Haughton	H10/3	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH024R1	341.95	Haughton	H12 Reg 98	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH022R2	100.57	Haughton	H12 Reg 98	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH022R1	87.45	Haughton	H12 Reg 98	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH017W1	213.03	Haughton	H13 Reg 97	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH015R1	175.37	Haughton	H13 Reg 97	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH015W1	82.08	Haughton	H13 Reg 97	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH016R1	79.74	Haughton	H13 Reg 97	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS060R1	39.43	Haughton	H16 REG 82 55ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS058W1	76.95	Haughton	H16 REG 82 55ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS056W1	29.64	Haughton	H16 REG 83 43ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS001D1	62.18	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS030D1	30.4	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS030D2	45.98	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS007D1	69.87	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS055D1	85.78	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS005D1	17.301	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS008D2	70.13	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS008D1	38.66	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS002D1	46.64	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS003D1	47.23	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS004D1	122.27	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH042R1	110.29	Haughton	H8 CHANNEL	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH041R1	18.512	Haughton	H8 CHANNEL	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH071R8	139.01	Haughton	HA CH 12.1KM SIPHON	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH071R10UNMETERED	0	Haughton	HA CH 12.1KM SIPHON	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH071R11	0	Haughton	HA CH 12.1KM SIPHON	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH071R7	41.53	Haughton	HA CH 12.1KM SIPHON	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	GL57224	71.13	Haughton	Haughton	Burdekin River 64km - 58km	BH Glady's Lagoon
27-Sep-04	2004	GL58113	29.14	Haughton	Haughton	Burdekin River 64km - 58km	BH Glady's Lagoon
27-Sep-04	2004	GL96044	121.59	Haughton	Haughton	Burdekin River 64km - 58km	BH Glady's Lagoon
27-Sep-04	2004	HH052W2	14.856	Haughton	Haughton	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS063R1	115.5	Haughton	Haughton	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	45197	35.3	Haughton	Haughton	Burdekin River 64km - 58km	z (obsolete) BH Commercial (Soper)
27-Sep-04	2004	39870W	112.16	Haughton	Haughton	Burdekin River 64km - 58km	z (obsolete) BH Commercial (Soper)
27-Sep-04	2004	HH071R6	76.47	Haughton	HMC REG 1 1728ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH071R3	102.16	Haughton	HMC REG 1 1728ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH030R1	72.794	Haughton	HMC REG 10 518ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH031R1	157.72	Haughton	HMC REG 10 518ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS076W1	359.65	Haughton	HMC REG 11 518ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS064R1	101.31	Haughton	HMC REG 11 518ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS062R1	61.99	Haughton	HMC REG 12 518ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS077R1	95.31	Haughton	HMC REG 12 518ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS078R1	81.3	Haughton	HMC REG 12 518ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS079R1	75.09	Haughton	HMC REG 12 518ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH071R12	97.24	Haughton	HMC REG 2 1728ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH071T-TRUCK	71.783	Haughton	HMC REG 2 1728ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH028R1	51.33	Haughton	HMC REG 8 604ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HH025W1	152.57	Haughton	HMC REG 8 604ML	Burdekin River 64km - 58km	BH Channel

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27-Sep-04	2004	HH029R1	231.23	Haughton	HMC REG 9 518ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	MB118W2	0	Millaroo	MB CH 16	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA170W1	28.02	Millaroo	Millaroo A main check 45	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA050W1	32.31	Millaroo	Millaroo A main check 45	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA049W1	30.68	Millaroo	Millaroo A main check 45	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA048W1	0	Millaroo	Millaroo A main check 45	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA055W1	18.22	Millaroo	Millaroo A main check 50	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA051W2	0	Millaroo	Millaroo A main check 50	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA051W1	9.78	Millaroo	Millaroo A main check 50	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MB063W1	31.9	Millaroo	Millaroo B Main check 55	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MB057W2	16.86	Millaroo	Millaroo B Main check 55	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MB057W1	1	Millaroo	Millaroo B Main check 55	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MB055W2	0	Millaroo	Millaroo B Main check 55	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MB069W1	29.5	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MB079W1	45.61	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MB136W1	3	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MB135W1	14.39	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MB134W1	0	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MB068W1	38.54	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MB118W1	21.301	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MB080W2	17.6	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MB080W1	17.38	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MB133W1	5.13	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MB129W1	7.69	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MB056W1	65.06	Millaroo	Millaroo B Pump Station	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA209R1	0	Millaroo	Millaroo Balancing Storage	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA168W1	12.572	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA167W1	11.811	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA019W1	32.89	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA127W1	42.664	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA022W1	0	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA021W1	9.073	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA020W1	16.86	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA089W1	11.856	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	MA020W2	16.81	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
27-Sep-04	2004	BN042W1	158.87	Barratta	REG 61 138ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN056R1	0	Barratta	REG 63 77ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN054R1	12.72	Barratta	REG 63 77ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN053R1	109.43	Barratta	REG 63 77ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS033D1	67.213	Haughton	REG RH5	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS032D1	92.11	Haughton	REG RH5	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS02AD1	53.75	Haughton	REG RH5	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	HS031D1	107.79	Haughton	REG RH5	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN057R1	0	Barratta	REG64	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN039W1	162.45	Barratta	REG65 103ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN035W1	45.44	Barratta	REG65 103ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN035W2	113.1	Barratta	REG65 103ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN040W1	0	Barratta	REG65 103ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN040R1	161.41	Barratta	REG65 103ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN034R1	218.59	Barratta	REG66 95ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN038W1	162.66	Barratta	REG66 95ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN035R1	72.52	Barratta	REG66 95ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN063W1	0	Barratta	REG67 77ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN013W1	0.2	Barratta	REG68 60ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN037R1OBSOLETE	0	Barratta	REG68 60ML	Burdekin River 64km - 58km	BH Channel

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27-Sep-04	2004	BN016W1	128.28	Barratta	REG68 60ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN014W1	64.01	Barratta	REG68 60ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN015W1	35.4	Barratta	REG68 60ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	BN018R1	63.32	Barratta	REG69 16ML	Burdekin River 64km - 58km	BH Channel
27-Sep-04	2004	EL048T1	28.83	Elliot	Regulator 49	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL048R1	0	Elliot	Regulator 49	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL049R1	85.45	Elliot	Regulator 49	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL045W1	125.02	Elliot	Regulator 51	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL046W2	32.7	Elliot	Regulator 51	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL046R1	45.35	Elliot	Regulator 51	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL050W1	35.8	Elliot	Regulator 51	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL050W2	47.97	Elliot	Regulator 51	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL044R1	37.24	Elliot	Regulator 52	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL041W1	78.31	Elliot	Regulator 52	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL051R1	33.49	Elliot	Regulator 52	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL051R2	0.48	Elliot	Regulator 52	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL050R1	61.79	Elliot	Regulator 52	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL044R3	23.6	Elliot	Regulator 53	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL044R2	61.55	Elliot	Regulator 53	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL041W3	123.23	Elliot	Regulator 53	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL041W2	124.66	Elliot	Regulator 53	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL57252	0.7	Elliot	Regulator 54	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL96078	18.19	Elliot	Regulator 54	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL387R1	211.2	Elliot	Regulator 54	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL54977	160	Elliot	Regulator 54	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL040R1	19.02	Elliot	Regulator 54	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL102R1	172.88	Elliot	Regulator 55	Burdekin River 58km - 50.3km	BH Channel
27-Sep-04	2004	EL102R2	42.13	Elliot	Regulator 55	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CA099W1	83.02	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA034W1	27.3	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA165W1	69.7	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA098W1	25.37	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA094W1	37.53	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA093W1	9.07	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA089W2	8.62	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA089W1	15.7	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA192W1	49.37	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA090W2	6.67	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA090W1	44.93	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA035W1	25.51	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA194W1	99.49	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA092W1	0	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA091W2	66.85	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA091W1	46.561	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA097W1	36.85	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA095W1	13.8	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA099W2	36.455	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA093W2	0	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA109W2	0.059	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA109W1	20.19	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA158W1	5.04	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA035W2	7.908	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA157W1	6.84	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA105W2	15.995	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA106W1	12.649	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel

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28-Sep-04	2004	CA107W2	25.84	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA108W1	52.04	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA107W3	0	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA107W1	0	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA105W1	18.608	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA103W1	15.135	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA100W1	37.079	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA101W1	53.311	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA092W2	2.898	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA091W3	6.87	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA134W1(CA097W3 on Streamline)	39.447	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA095W2	6.452	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA110W3	0	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA110W2	14.196	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA110W1	11.052	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA104W1	64.68	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA102W1	30.149	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA036W1	32.48	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA113W1	36.83	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA112W1	97.2	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA117W1	17.647	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA114W1	21.638	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA164W1	6.343	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA163W1	11.228	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA116W1	18.208	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA207W1	28.908	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA162W1	7.51	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA114W2	40.903	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA161W1	3.42	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA044W1	6.88	Clare	A4 offtake to A4/2	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA228W1	9.1	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA136W1	31.995	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA204W1	26.476	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA206W1	10.086	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA205W1	14.151	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA119W1	8.586	Clare	A4/2 to A4/2/1 offtake	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA121W1	89.856	Clare	A4/2 to A4/2/1 offtake	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA044W2	13.17	Clare	A4/2 to A4/2/1 offtake	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA120W1	21.271	Clare	A4/2 to A4/2/1 offtake	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA227W1	7.37	Clare	A4/2/1	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA226W1	15.74	Clare	A4/2/1	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA225W1	93.63	Clare	A4/2/1	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CB050W1	12.87	Clare	B1 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB195W3	32.96	Clare	B1 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB195W1	34.868	Clare	B1 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB145W2	102.26	Clare	B1 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB049W2	25.77	Clare	B1 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB170W1	32.82	Clare	B1 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB049W1	29.19	Clare	B1 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB052W1	49.39	Clare	B2 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB145W1	8.64	Clare	B2 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	BM270W1	249.59	Barratta	BA1 REG 41 23ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM256R1	66.46	Barratta	BA1/1 OFFTAKE	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM246R1	107.92	Barratta	BA1/1 OFFTAKE	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BN017-100OBSOLETE	0	Barratta	Barratta	Burdekin River 64km - 58km	BH Channel

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28-Sep-04	2004	BM280R2	71	Barratta	Barratta	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM241R1	285.88	Barratta	BMC REG 18	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BN032W1	192.98	Barratta	BMC REG 25	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BN044W1	103.23	Barratta	BMC REG 26	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BN033W1	72.54	Barratta	BMC REG 26	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BN043W1	68.02	Barratta	BMC REG 26	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	5B	71.17	Barratta	BMC Reg 27	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	6B	0	Barratta	BMC Reg 27	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BN009R1	58.69	Barratta	BMC REG 28	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BN010W1	156.71	Barratta	BMC REG 28	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BN001R1	51.64	Barratta	BMC REG 28	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BN002R1	47.86	Barratta	BMC REG 28	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BN003R1	99.71	Barratta	BMC REG 28	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BN009R2	67.32	Barratta	BMC REG 28	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	CUNGULLA TOWN WATER	87.662	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	Burdekin River 64km - 58km	BH Commercial (Citiwater)
28-Sep-04	2004	52529	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
28-Sep-04	2004	38651	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
28-Sep-04	2004	5702	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
28-Sep-04	2004	58109	284.53	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
28-Sep-04	2004	6003	48.286	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
28-Sep-04	2004	6139	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
28-Sep-04	2004	5291	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
28-Sep-04	2004	5878	58.118	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
28-Sep-04	2004	49100	4.694	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
28-Sep-04	2004	39856W	10.22	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
28-Sep-04	2004	5294	54.848	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
28-Sep-04	2004	5292	13.038	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
28-Sep-04	2004	6498	62.99	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
28-Sep-04	2004	55002	95.09	Burdekin River & Burdekin Falls Dam	Burdekin River from Clare B to Elliot Pump Station	Burdekin River 64km - 58km	BH River
28-Sep-04	2004	33510	0	Burdekin River & Burdekin Falls Dam	Burdekin River from Clare B to Elliot Pump Station	Burdekin River 64km - 58km	BH River
28-Sep-04	2004	55076	85.53	Burdekin River & Burdekin Falls Dam	Burdekin River from Clare B to Elliot Pump Station	Burdekin River 90km - 64km	BH River
28-Sep-04	2004	489451	274.58	Burdekin River & Burdekin Falls Dam	Burdekin River from Clare B to Elliot Pump Station	Burdekin River 90km - 64km	BH River
28-Sep-04	2004	6597	124.654	Burdekin River & Burdekin Falls Dam	Burdekin River from Clare B to Elliot Pump Station	Burdekin River 90km - 64km	BH River
28-Sep-04	2004	CA045W1	0.655	Clare	CAMC below A4 offtake	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA047W1	0	Clare	CAMC below A4 offtake	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA118W1	0	Clare	CAMC below A4 offtake	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA046W1	0.602	Clare	CAMC below A4 offtake	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA046W2	6.976	Clare	CAMC below A4 offtake	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA043W1	48.757	Clare	CAMC Overflow to A4 offtake	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CA042W1	15.507	Clare	CAMC Overflow to A4 offtake	D/S of Clare Weir	BH Channel
28-Sep-04	2004	MA090W2	42.37	Millaroo	Ch 13/1 check 157	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA158W1	20.31	Millaroo	Ch 13/1 check 157	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA088W1	21.01	Millaroo	Ch 13/1 check 157	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB075W1	0	Millaroo	CH 15/5	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA213W1	101.32	Millaroo	Channel 2 Reg 104	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA003W1	0	Millaroo	Channel 2 Reg 106	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA003W2	189.66	Millaroo	Channel 2 Reg 106	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA214R1	58.18	Millaroo	Channel 2 Reg 107	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA216R1	195.72	Millaroo	Channel 2 Reg 107	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA217R1	88.29	Millaroo	Channel 2 Reg 107	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA215R1	107.77	Millaroo	Channel 2 Reg 107	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	CB024W1	49.91	Clare	CHECK 24C	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	DB072W1	12.15	Dalbeg	Check 27	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB025W1	19.06	Dalbeg	Check 27	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB026W1	0	Dalbeg	Check 27	Burdekin Falls Dam & Burdekin River	BH Channel

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28-Sep-04	2004	DB075W1	12.45	Dalbeg	Check 27	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	CA041W1	17.908	Clare	Check 38 to CAMC Overflow	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA040W1	29.397	Clare	Check 38 to CAMC Overflow	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA039W1	25.464	Clare	Check 38 to CAMC Overflow	D/S of Clare Weir	BH Channel
28-Sep-04	2004	DB036W1	31.1	Dalbeg	Check 41	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB035W1	19.32	Dalbeg	Check 41	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB037W1	27.31	Dalbeg	Check 41	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB034W1	17.37	Dalbeg	Check 41	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB033W1	38.81	Dalbeg	Check 41	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB032W1	20.24	Dalbeg	Check 41	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB041W1	45.73	Dalbeg	Check 41	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB038W1	24.48	Dalbeg	Check 41	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	CB050W2	25.43	Clare	CHECK 50	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB050W3	24.95	Clare	CHECK 50	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB051W3	32.43	Clare	CHECK 50	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB051W2	16.01	Clare	CHECK 50	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB051W1	24.93	Clare	CHECK 50	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	MB065W2	0	Millaroo	CHECK 71	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB072W3	0	Millaroo	CHECK 71	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB072W2	0	Millaroo	CHECK 71	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB072W1	0	Millaroo	CHECK 71	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB073W3	5.6	Millaroo	CHECK 71	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB073W1	0	Millaroo	CHECK 71	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB074W1	21.75	Millaroo	CHECK 71	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	CB053W1	11.66	Clare	CHECK52	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB052W2	6.21	Clare	CHECK52	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB055W1	96.275	Clare	CHECK53	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB056W1	2.19	Clare	CHECK53	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB054W1	33.6	Clare	CHECK53	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB053W2	21.66	Clare	CHECK53	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB057W1	62.15	Clare	CHECK53	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	BN136R1	29.822	Clare	Clare	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CA160W1	7.95	Clare	CLARE A MAIN CH from CLARE WTP to Check 38	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA159W1	13.99	Clare	CLARE A MAIN CH from CLARE WTP to Check 38	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CA038W1	39.99	Clare	CLARE A MAIN CH from CLARE WTP to Check 38	D/S of Clare Weir	BH Channel
28-Sep-04	2004	CB171W1	42.27	Clare	CLARE B MAIN CH	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB171W3	22.39	Clare	CLARE B MAIN CH	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	CB171W2	32	Clare	CLARE B MAIN CH	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	DB027W1	31.25	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB047W2	9.27	Dalbeg	DB CH 3	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB047W1	21.87	Dalbeg	DB CH 3	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB081W1	7.76	Dalbeg	DB CH 3	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB073W1	1.68	Dalbeg	DB CH 3	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB048W1	32.279	Dalbeg	DB CH 4	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB057W1	24.98	Dalbeg	DB CH 4	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB049W2	30.727	Dalbeg	DB CH 4	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB049W1	85.03	Dalbeg	DB CH 4	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB042W1	39.31	Dalbeg	DB Main from DBCH 3 to DBCH 4	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB043W1	60.83	Dalbeg	DB Main from DBCH 3 to DBCH 4	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB044W1	24.21	Dalbeg	DB Main from DBCH 3 to DBCH 4	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB046W1	17.71	Dalbeg	DB Main from DBCH 3 to DBCH 4	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB045W1	23.4	Dalbeg	DB Main from DBCH 3 to DBCH 4	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB053W1	32.44	Dalbeg	DB Main from DBCH 4 to end	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB052W2	12.49	Dalbeg	DB Main from DBCH 4 to end	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB052W1	12.39	Dalbeg	DB Main from DBCH 4 to end	Burdekin Falls Dam & Burdekin River	BH Channel

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28-Sep-04	2004	DB050W1	29.52	Dalbeg	DB Main from DBCH 4 to end	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB051W2	1	Dalbeg	DB Main from DBCH 4 to end	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	DB051W1	21.82	Dalbeg	DB Main from DBCH 4 to end	Burdekin Falls Dam & Burdekin River	BH Channel
28-Sep-04	2004	35509	1.84	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	34941	58.52	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	34942	57.643	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	76173	75.57	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	52539	81.03	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Commercial (Parison Agreement)
28-Sep-04	2004	35500	33.94	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Commercial (Parison Agreement)
28-Sep-04	2004	34955 BHWSS	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	4562	9.71	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Commercial (Parison Agreement)
28-Sep-04	2004	96127	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	54955W	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	5357 BHWSS	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	33943	4.889	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	39050	72.159	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	96051	0.52	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Commercial (CSR Limited - sugar)
28-Sep-04	2004	HH019R1	111.15	Haughton	H10 Reg 99	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HS061R1	154.69	Haughton	H16 REG 82 55ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HS059R1	75.53	Haughton	H16 REG 82 55ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HS055W1	45.94	Haughton	H16 REG 83 43ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HH071R1	184.51	Haughton	H6	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HH070R1	87.44	Haughton	H6	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HH073R1	302.79	Haughton	H6	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HH072R1	155.24	Haughton	H6	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HH068R1	100.06	Haughton	H6 Reg 110	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HH069R1	95.4	Haughton	H6 Reg 110	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HH076R1	88.76	Haughton	H6/1 Reg 112	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HH075R1	0.01	Haughton	H6/1 Reg 112	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HH074R1	0.01	Haughton	H6/1 Reg 112	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HH060R1	216.16	Haughton	H7 Reg 113	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HH061R1	2.67	Haughton	H7 Reg 113	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HH065R1	113.07	Haughton	H7 Reg 114	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HH063R1	38.78	Haughton	H7 Reg 114	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HH064R1	0	Haughton	H7 Reg 114	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HH066R1	285.94	Haughton	H7 Reg 114	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HH062R1	84.3	Haughton	Haughton	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HH071R13	164.5	Haughton	Haughton	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	45145	0	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	45144	76.06	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	39087	104.21	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	57257	294.86	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	HH026R1	139.94	Haughton	HMC	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HH021R1	288.53	Haughton	HMC	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	HH027R1	162.3	Haughton	HMC REG 8 604ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BN17W5A	221.75	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BN17W7	72.06	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BN17W6	65.58	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BN17W4	164.35	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BN128W1	65.66	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BN031W1	394.56	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	MB077W1	23.25	Millaroo	MB CH 15/3	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB071W2	15.86	Millaroo	MB CH 15/3	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB085W1	19.48	Millaroo	MB CH 15/3	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB085W2	21.23	Millaroo	MB CH 15/3	Burdekin River 90km - 64km	BH Channel

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28-Sep-04	2004	MB076W1	25.37	Millaroo	MB CH 15/3	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB086W2	39.4	Millaroo	MB CH 15/3	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB086W1	6.71	Millaroo	MB CH 15/3	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB076W2	2.22	Millaroo	MB CH 15/3	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB078W1	27.64	Millaroo	MB CH 15/3	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB084W1	35.73	Millaroo	MB CH 16	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA090W3	4.7	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA092W2	18.19	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA052W1	67.28	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA090W4	8.53	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA092W1	10.13	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA092W3	40.7	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA162W1	5.95	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA160W1	15.84	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA166W1	4.45	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA091W1	20.58	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA091W2	23.09	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA159W1	11.54	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA053W1	93.01	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA163W1	30.04	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA165W1	14.55	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA164W1	18.98	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA161W1	15.26	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA087W1	0.37	Millaroo	Millaroo A Ch 13/1 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA157W1	13.67	Millaroo	Millaroo A Ch 13/1 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA114W1	17.93	Millaroo	Millaroo A Ch 13/1 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA031W2	8.81	Millaroo	Millaroo A Ch 3	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA031W1	18.86	Millaroo	Millaroo A Ch 3	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA033W1	37.15	Millaroo	Millaroo A Ch 3	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA032W1	44.04	Millaroo	Millaroo A Ch 3	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA034W2	5.28	Millaroo	Millaroo A Ch 3	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA034W1	41.95	Millaroo	Millaroo A Ch 3	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA105W1	30.91	Millaroo	Millaroo A Ch 3	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA038W2	14.46	Millaroo	Millaroo A Ch 4	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA038W1	13.87	Millaroo	Millaroo A Ch 4	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA045W1	26.23	Millaroo	Millaroo A main check 175	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA004W3	11.94	Millaroo	Millaroo A main check 175	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA004W2	12.8	Millaroo	Millaroo A main check 175	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA004W1	49.12	Millaroo	Millaroo A main check 175	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA175W2	37.43	Millaroo	Millaroo A main check 175	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA175W1	35.75	Millaroo	Millaroo A main check 175	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA175W4	25.23	Millaroo	Millaroo A main check 175	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA175W3	29.43	Millaroo	Millaroo A main check 175	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA009W1	9.11	Millaroo	Millaroo A main check 175	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA040W1	20.32	Millaroo	Millaroo A main check 35	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA036W1	20.47	Millaroo	Millaroo A main check 35	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA039W1	13.04	Millaroo	Millaroo A main check 35	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA037W1	11.59	Millaroo	Millaroo A main check 35	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA041W1	18.04	Millaroo	Millaroo A main check 40	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA008W1	45.54	Millaroo	Millaroo A main check 40	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA007W1	66.42	Millaroo	Millaroo A main check 40	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA137W1	9.64	Millaroo	Millaroo A main check 40	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA042W1	49.21	Millaroo	Millaroo A main check 40	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA046W1	31.49	Millaroo	Millaroo A main check 45	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA024W1	39.01	Millaroo	Millaroo A main Reg 108	Burdekin River 90km - 64km	BH Channel

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28-Sep-04	2004	MA023W1	13.93	Millaroo	Millaroo A main Reg 108	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA035W1	38.26	Millaroo	Millaroo A main Reg 108	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA028W1	41.12	Millaroo	Millaroo A main Reg 108	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA025W1	13.31	Millaroo	Millaroo A main Reg 108	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA026W1	24.05	Millaroo	Millaroo A main Reg 108	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA030W1	42.78	Millaroo	Millaroo A main Reg 108	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA029W1	39.01	Millaroo	Millaroo A main Reg 108	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MA027W1	23.93	Millaroo	Millaroo A main Reg 108	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB061W1	30.995	Millaroo	Millaroo B Ch 14	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB113W1	20.289	Millaroo	Millaroo B Ch 14	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB062W1	29.052	Millaroo	Millaroo B Ch 14	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB060W2	14.407	Millaroo	Millaroo B Ch 14	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB060W1	16.403	Millaroo	Millaroo B Ch 14	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB059W1	45.085	Millaroo	Millaroo B Ch 14	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB071W1	18.88	Millaroo	Millaroo B Ch 15 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB070W1	28.19	Millaroo	Millaroo B Ch 15 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB064W1	29.82	Millaroo	Millaroo B Ch 15 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB065W1	42.49	Millaroo	Millaroo B Ch 15 offtake	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB131W1	18.37	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB132W1	14.06	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	MB166W2	65.51	Millaroo	Millaroo B Main from Ch 14 to Ch 15	Burdekin River 90km - 64km	BH Channel
28-Sep-04	2004	39703	0	Giru Benefited Area	REEDBEDS P/S	Burdekin River 64km - 58km	BH Commercial (Parison Agreement)
28-Sep-04	2004	BM264R1	34.3	Barratta	REG 47 86ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM265W1	183.02	Barratta	REG 47 86ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM262R1	339.49	Barratta	REG38 130ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM263W2	0.02	Barratta	REG39 130ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM264W1	0.13	Barratta	REG39 130ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM263W1	0	Barratta	REG39 130ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM263R1	27.07	Barratta	REG39 130ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM271W1	507.07	Barratta	REG40 32ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM248W1	230.66	Barratta	REG42 137ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM247W1	23.67	Barratta	REG42 137ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM247R1	192.64	Barratta	REG42 137ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM255W1	467.16	Barratta	REG42 137ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM254R1	815.45	Barratta	REG43 109ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM253W1	85.24	Barratta	REG43 109ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM249W1	291.43	Barratta	REG43 109ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM250W1	0	Barratta	REG44 109ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM251W1	296.02	Barratta	REG45 109ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM283W1	182.431	Barratta	REG46 109ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM282W2-Obsolete	113.55	Barratta	REG46 109ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM282W1	130.15	Barratta	REG46 109ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM281W2	18.01	Barratta	REG46 109ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM281W1	140.29	Barratta	REG46 109ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM280R1	85.42	Barratta	REG46 109ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM252W1	44.31	Barratta	REG46 109ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM268W1	0	Barratta	REG48 56ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM267W1	51.6	Barratta	REG48 56ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM273R2	31.13	Barratta	REG48 56ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM273R1	203.54	Barratta	REG48 56ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM266W1	143.19	Barratta	REG48 56ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	BM272W1	0	Barratta	REG48 56ML	Burdekin River 64km - 58km	BH Channel
28-Sep-04	2004	EL100R1	44.9	Elliot	Regulator 55	Burdekin River 58km - 50.3km	BH Channel
28-Sep-04	2004	41572	0.95	Giru Benefited Area	SECOND LAGOON	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	57339	128.907	Giru Benefited Area	SECOND LAGOON	Burdekin River 64km - 58km	BH Giru Groundwater Area

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28-Sep-04	2004	39989	39.638	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	49033	90.91	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	49090	52.23	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	52577	61.39	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	39424	83.83	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	39054	18.41	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	48955	15.08	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
28-Sep-04	2004	57256	296.8	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	CA127W1	13.337	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
29-Sep-04	2004	CA203W1	5.254	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
29-Sep-04	2004	CA125W1	1.093	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
29-Sep-04	2004	CA202W1	7.2	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
29-Sep-04	2004	CA126W1	18.88	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
29-Sep-04	2004	CB199W1	51.602	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB216W1	15.614	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB068W1	46.792	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB184W1	83.715	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB058W1	24.277	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB212W1	16.162	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB220W1	11.153	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB213W1	13.352	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB220W3	7.611	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB197W1	64.81	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB066W1	107.066	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB219W1	109.172	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB215W1	26.42	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB214W1	17.048	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB083W1	39.78	Clare	B5 OFFTAKE	D/S of Clare Weir	BH Channel
29-Sep-04	2004	CB088W2	26.89	Clare	B6 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB088W1	11.45	Clare	B6 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB085W2	37.69	Clare	B6 OFFTAKE	D/S of Clare Weir	BH Channel
29-Sep-04	2004	CB085W1	36.69	Clare	B6 OFFTAKE	D/S of Clare Weir	BH Channel
29-Sep-04	2004	CB191W1	0	Clare	B8 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB074W2	0	Clare	B8 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB208W1	24.31	Clare	B8/1 OFFTAKE	D/S of Clare Weir	BH Channel
29-Sep-04	2004	CB190W1	40.36	Clare	B8/1 OFFTAKE	D/S of Clare Weir	BH Channel
29-Sep-04	2004	CB209W1	18.65	Clare	B8/1 OFFTAKE	D/S of Clare Weir	BH Channel
29-Sep-04	2004	BJ060W1	32.96	Barratta	BA8 Channel	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ057W2	80.66	Barratta	BA8 Offtake	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ057W1	61.18	Barratta	BA8 Offtake	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ057W3	21.31	Barratta	BA8 Offtake	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BN004W1	0	Barratta	BMC REG 28	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BN012W2	79.14	Barratta	BMC REG 29	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BN011W1	198.59	Barratta	BMC REG 29	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BN005W1	149.95	Barratta	BMC REG 29	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BN007W1	17.96	Barratta	BMC REG 29	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BN008W1	150.42	Barratta	BMC REG 29	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ055W1	65.45	Barratta	BMC REG 32	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ054R1	119.54	Barratta	BMC REG 32	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ079W1	102.61	Barratta	BMC REG 32	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ080W1	144.694	Barratta	BMC REG 33	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ056R1	118.83	Barratta	BMC REG 33	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ057AW1	57.02	Barratta	BMC REG 33	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ089R1	104.22	Barratta	BMC REG 34	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ080R5	119.48	Barratta	BMC REG 34	Burdekin River 64km - 58km	BH Channel

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29-Sep-04	2004	BJ080R4	185.75	Barratta	BMC REG 34	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ080R3	124.58	Barratta	BMC REG 34	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ080R2	94.65	Barratta	BMC REG 34	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ080R1	106.52	Barratta	BMC REG 34	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ090R1	156.35	Barratta	BMC REG 34	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	96050	369.9	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
29-Sep-04	2004	5831	105.28	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
29-Sep-04	2004	49059A	772	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
29-Sep-04	2004	38446	153.03	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
29-Sep-04	2004	6508	8.87	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
29-Sep-04	2004	6510	6.28	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
29-Sep-04	2004	58101	2193	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
29-Sep-04	2004	5828	279.17	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
29-Sep-04	2004	52481	284.04	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
29-Sep-04	2004	451391	85.2	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
29-Sep-04	2004	5245	7.171	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	z (obsolete) BH Commercial (BQC Quarries)
29-Sep-04	2004	6407 BHWSS	22.66	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
29-Sep-04	2004	5822	104.56	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
29-Sep-04	2004	5823	441.95	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
29-Sep-04	2004	DB074W1	12.68	Dalbeg	Channel 2/6 offtake	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DB040W1	0	Dalbeg	Channel 2/6 offtake	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DB082W1	8.47	Dalbeg	Channel 2/6 offtake	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DB017W2	10.46	Dalbeg	Check 18	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DB017W1	5.31	Dalbeg	Check 18	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DB016W1	43.89	Dalbeg	Check 18	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DB018W1	10.64	Dalbeg	Check 18	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	CB188W2	43.13	Clare	CHECK 189	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB188W1	38.76	Clare	CHECK 189	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB191W2	0	Clare	CHECK 189	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB178W1	73.1	Clare	CHECK 189	D/S of Clare Weir	BH Channel
29-Sep-04	2004	CB061W1	85.92	Clare	CHECK 24C	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB024W2	57.24	Clare	CHECK 24C	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	DB024W1	14.8	Dalbeg	Check 27	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DB031W1	60.47	Dalbeg	CHECK 28	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DB039W1	18.39	Dalbeg	CHECK 28	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DB030W1	41.85	Dalbeg	CHECK 28	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DB029W1	13.1	Dalbeg	CHECK 28	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	CB072W1	20.67	Clare	CHECK 69	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB063W1	33.08	Clare	CHECK61	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB071W1	34.1	Clare	CHECK61	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB065W1	25.01	Clare	CHECK61	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB023W2	11.78	Clare	CHECK61	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB023W1	24.69	Clare	CHECK61	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB069W1	27.32	Clare	CHECK61	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB068W2	20.397	Clare	Clare	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB187W1(CB176W1)	173.323	Clare	Clare	D/S of Clare Weir	BH Channel
29-Sep-04	2004	CB084W1	23.44	Clare	Clare	D/S of Clare Weir	BH Channel
29-Sep-04	2004	DA009W1	13.08	Dalbeg	DA CH 1	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DA015W2	20.65	Dalbeg	DA CH 1/1 OFFTAKE	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DA015W1	19.33	Dalbeg	DA CH 1/1 OFFTAKE	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DA009W2	26.33	Dalbeg	DA CH 1/1 OFFTAKE	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DA012W3	9.93	Dalbeg	DA CH 1/1 OFFTAKE	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DA012W2	10.9	Dalbeg	DA CH 1/1 OFFTAKE	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DA012W1	43	Dalbeg	DA CH 1/1 OFFTAKE	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DA007W2	15.4	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel

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29-Sep-04	2004	DA007W1	26.1	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DA006W2	15.71	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DA006W1	14.54	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DA011W1	29.31	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DA002W1	16.2	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DA004W1	48.56	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DA003W1	40.56	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DA010W3	12.5	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DA010W2	11.4	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DA010W1	4.85	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DA005W2	7.27	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DA005W1	20.66	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DB028W1	15.34	Dalbeg	DBCH 2	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DB023W1	17.15	Dalbeg	DBCH 2	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DB023W2	32.78	Dalbeg	DBCH 2	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DB019W1	37.21	Dalbeg	DBCH 2	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DB022W2	72.26	Dalbeg	DBCH 2	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	DB022W1	4.08	Dalbeg	DBCH 2	Burdekin Falls Dam & Burdekin River	BH Channel
29-Sep-04	2004	60167	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	76755	142.66	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	39078	25.877	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	39778	21.9	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	39777	24.002	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	76002	36.455	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	39044	23.38	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	39175	53.54	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	39173	491.23	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	39140	92.52	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	60383	11.571	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	34962	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	34961 OBSOLETE	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	34958	68.26	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	34964	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	HH053W1	81.7	Haughton	H10/3	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	39156	48.91	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	39154	107.72	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	39160	15.947	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	39161	34.514	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	39162	42.447	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	54987	34.365	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	34960	0	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	48979	216.93	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	39155	91.133	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
29-Sep-04	2004	DEPOT	0.202	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
29-Sep-04	2004	M9/10	0.004	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
29-Sep-04	2004	DPI4	0	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
29-Sep-04	2004	MILLAROO POOL	1.264	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
29-Sep-04	2004	MILLAROO HALL	0.436	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
29-Sep-04	2004	Lot1 PER5994	0	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
29-Sep-04	2004	M15/15	0.207	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
29-Sep-04	2004	MILLAROO RESIDENCE	0.203	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
29-Sep-04	2004	SCHOOL	2.886	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
29-Sep-04	2004	M19/10	0.234	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
29-Sep-04	2004	DPI1	0.216	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
29-Sep-04	2004	DPI3	0.216	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)

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29-Sep-04	2004	M5/10	0.072	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water Staff)
29-Sep-04	2004	S11	0.097	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
29-Sep-04	2004	M3/14	0.197	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water Staff)
29-Sep-04	2004	M3/14A	0.347	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water Staff)
29-Sep-04	2004	M8/10	0	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
29-Sep-04	2004	M13/15	0.092	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water Staff)
29-Sep-04	2004	M13/15A	0.231	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water Staff)
29-Sep-04	2004	M4/17	0.118	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water Staff)
29-Sep-04	2004	CB142W2	17.63	Clare	OVERFLOW	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB142W1	38.8	Clare	OVERFLOW	Burdekin River 58km - 50.3km	BH Channel
29-Sep-04	2004	CB222W2	37.11	Clare	OVERFLOW	D/S of Clare Weir	BH Channel
29-Sep-04	2004	CB222W1	25.76	Clare	OVERFLOW	D/S of Clare Weir	BH Channel
29-Sep-04	2004	BJ058R1	51.1	Barratta	Regulator 76	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ061R1	104.76	Barratta	Regulator 76	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ060R1	162.18	Barratta	Regulator 76	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ058R2	51.97	Barratta	Regulator 77	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ061R2	71.17	Barratta	Regulator 77	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ086R2	14.04	Barratta	Regulator 78	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	BJ086R1	241.5	Barratta	Regulator 78	Burdekin River 64km - 58km	BH Channel
29-Sep-04	2004	39054A	38.16	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	CA107W3	45	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
30-Sep-04	2004	CB220W2	27.584	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	CB082W1	52.91	Clare	B4 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	CB029W3	56.44	Clare	B5 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	CB029W2	60.56	Clare	B5 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	CB029W1	0	Clare	B5 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	CB048W1	61.83	Clare	B6 OFFTAKE	D/S of Clare Weir	BH Channel
30-Sep-04	2004	BN051W2	40	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP34W1	52.41	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP44W1	24.71	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP42W1	19.82	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP43W1	13.2	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP40W1	48.38	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP30W1	38.6	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP31W1	91.66	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP31W2	2.03	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP32W1	58.37	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP33W1	69.04	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP41W1	2.64	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ051W1	117.22	Barratta	BA9 Offtake	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ069W1	73.11	Barratta	BA9/1 Offtake	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ050R1	90.51	Barratta	BARRATTA MAIN	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BM210W1	5.17	Barratta	BMC REG 20	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BN004W1	87	Barratta	BMC REG 28	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ078W1	112.33	Barratta	BMC REG 31	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ053W1	24.69	Barratta	BMC REG 31	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ054W1	46.35	Barratta	BMC REG 31	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ052R1	169.22	Barratta	BMC REG 31	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	RIPARIAN - SOUTH	0	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
30-Sep-04	2004	MCDOWELLS PUMP 2	1842	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
30-Sep-04	2004	MCDOWELLS PUMP 3	960	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
30-Sep-04	2004	54936A	639.42	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
30-Sep-04	2004	ROCKS	5062	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
30-Sep-04	2004	PC NO. 2	7505	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
30-Sep-04	2004	RITA ISLAND	864	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)

Effective Date	Year	Offtake Number	Volume	Operational System	Operational Section	ROL Zone	Billing Group
30-Sep-04	2004	RONCATO	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
30-Sep-04	2004	Riparian	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
30-Sep-04	2004	6516	166.88	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
30-Sep-04	2004	54984W	96.16	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
30-Sep-04	2004	Warrens Gully	2230	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
30-Sep-04	2004	MCDOWELLS PUMP 1	658	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
30-Sep-04	2004	D/River	812	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
30-Sep-04	2004	55058	152.89	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
30-Sep-04	2004	55058B	105.41	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
30-Sep-04	2004	CA045W1	26	Clare	CAMC below A4 offtake	D/S of Clare Weir	BH Channel
30-Sep-04	2004	MA026W2	6	Millaroo	Channel 2 Reg 104	Burdekin River 90km - 64km	BH Channel
30-Sep-04	2004	DA087W1	13.13	Dalbeg	CHECK 20	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DA088W1	15.33	Dalbeg	CHECK 20	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DA086W1	14.71	Dalbeg	CHECK 20	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	CB076W1	55.26	Clare	CHECK 69	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	CB166W1	9.01	Clare	CHECK 69	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	CB167W1	14.32	Clare	CHECK 69	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	CB168W1	11.64	Clare	CHECK 69	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	CB075W1	30.85	Clare	CHECK 69	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	CB074W1	0.01	Clare	CHECK 69	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	CB169W1	0	Clare	CHECK 69	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	CB077W1	2.38	Clare	CHECK 76	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	CB080W1	45.47	Clare	CHECK 76	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	CB079W1	53.68	Clare	CHECK 76	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	CB078W1	64.78	Clare	CHECK 76	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	CB081W1	18.92	Clare	CHECK 80	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	CB081W2	7.39	Clare	CHECK 80	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	CB080W2	8.8	Clare	CHECK 80	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	DA054W1	45.55	Dalbeg	CHECK 9	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DA014W1	55.57	Dalbeg	CHECK 9	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DA014W2	55.97	Dalbeg	CHECK 9	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DA020W1	0	Dalbeg	CHECK 9	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DA013W1	35.63	Dalbeg	CHECK 9	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DA008W1	5.37	Dalbeg	CHECK 9	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DA013W3	47.22	Dalbeg	CHECK 9	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	C11/10	0.092	Clare	Clare	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C15/7	0.104	Clare	Clare	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	CL117R1	0	Clare	Clare	Burdekin River 58km - 50.3km	BH Commercial (Rural Stock & Domestic)
30-Sep-04	2004	DA084W1	11.07	Dalbeg	DA CH 1/3 OFFTAKE	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DA085W1	10.58	Dalbeg	DA CH 1/3 OFFTAKE	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DALBEG HALL	0.729	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Commercial (Town Water)
30-Sep-04	2004	S10	0.072	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Commercial (Town Water)
30-Sep-04	2004	D22/11	0.139	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Commercial (Town Water)
30-Sep-04	2004	D22/11B	0.561	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Commercial (Town Water)
30-Sep-04	2004	DTW Lot 29 GS 949(wrca)	0.351	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Commercial (Town Water)
30-Sep-04	2004	DTW Lot1 CP D9154(rca)	0.006	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Commercial (Town Water)
30-Sep-04	2004	DTW Lot18 D9156	0.174	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Commercial (Town Water)
30-Sep-04	2004	D24/11	0.129	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Commercial (Town Water)
30-Sep-04	2004	SHED	0.027	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Commercial (Town Water)
30-Sep-04	2004	DA071W1	20.396	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DA069W1	14.44	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DA068W1	5.97	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DA067W1	15.18	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DA062W1	6.29	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DA064W1	10.45	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel

Effective Date	Year	Offtake Number	Volume	Operational System	Operational Section	ROL Zone	Billing Group
30-Sep-04	2004	DA063W1	9.49	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DA061W1	8.06	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DA066W1	21.68	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DA070W1	31.353	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DA065W1	31.64	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DB094W1	1.53	Dalbeg	DB CH5	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	DB093W1	0	Dalbeg	DB CH5	Burdekin Falls Dam & Burdekin River	BH Channel
30-Sep-04	2004	34966	13.467	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	35255	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	34993	33.469	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39098	42.899	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	60654 BHWSS	176.78	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	34988	23.375	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	34987	23.904	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39117	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39116	35.6	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	60620	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	85935	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	57260p2	487.73	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39051	51.339	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	34939	42.3	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	60228 BHWSS	121.242	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	34936	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	34935	93.532	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	35021	24.8	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	35019	24.922	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39211	30.874	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39821	69.743	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	57274	60.22	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	76236	29.27	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	35558	31.265	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	35555	47.123	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39822	62.66	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39722	30.409	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	54157	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39122	0.045	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	54700UNMETERED	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	58127UNMETERED	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39145	29.468	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39148	70.05	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39202	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	96185	23	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	96190	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	96189	56.578	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	96188	79.325	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	96187	59.074	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	105099	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	35510	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	35508	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39141	82.36	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39730 BHWSS	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	60508	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	35619	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	35618	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	35617	44.603	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area

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30-Sep-04	2004	60509	78.933	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39049	2.76	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39062	93.05	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	52420	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Commercial (CSR Limited - sugar)
30-Sep-04	2004	58126	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Commercial (CSR Limited - sugar)
30-Sep-04	2004	34934	120.207	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	34933	41.575	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	6902	25.21	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39731	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	57346	794.34	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	HH013R1	83.1	Haughton	H10 Reg 100	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS081R1	67.52	Haughton	H15	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS080R1	0	Haughton	H15	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS080R1	186	Haughton	H15	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS079W1	23.18	Haughton	H15 OFFTAKE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS089R2	63.88	Haughton	H15 REG 94	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS089R1	13.61	Haughton	H15 REG 94	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS088R1	262.7	Haughton	H15 REG 94	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS083R1	120.12	Haughton	H15/1	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS087R1	248.74	Haughton	H15/2	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS090W1	230.43	Haughton	H15/2	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS091R1	45.82	Haughton	H15/2	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS085R1	140.66	Haughton	H17 OFFTAKE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS084R1	82.58	Haughton	H17 OFFTAKE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS086W1	99.49	Haughton	H17 OFFTAKE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS039R1	34.982	Haughton	H17 OFFTAKE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS038R1	57.03	Haughton	H17 OFFTAKE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS071W1	88.14	Haughton	H18 REG 85 14ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS171W1	172.74	Haughton	H18 REG 85 14ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS001R1	73.48	Haughton	H19 REG 86 51ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS004R1	104.308	Haughton	H19 REG 86 51ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS002R1	60.38	Haughton	H19 REG 86 51ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS020R1	20.41	Haughton	H19 REG 86 51ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS013R1	366.61	Haughton	H19 REG 86 51ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS071R1	33.46	Haughton	H20 REG 87 86ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS006R1	143.64	Haughton	H20 REG 87 86ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS005R2	29.24	Haughton	H20 REG 87 86ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS005R3	141.25	Haughton	H20 REG 87 86ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS067R1	126.75	Haughton	H20 REG 87 86ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS069R1	38.55	Haughton	H20 REG 87 86ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS065R1	93.73	Haughton	H20/1 REG 88 47ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS066R1	214.36	Haughton	H20/1 REG 88 47ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS168R1	131.91	Haughton	H20/1 REG 88 47ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS167R1	78.12	Haughton	H20/1 REG 88 47ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS069R2	141.7	Haughton	H20/1 REG 88 47ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS001R2OBSOLETE	0	Haughton	Haughton	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS082R1	0	Haughton	Haughton	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL002AR1	8.399	Haughton	Haughton	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	58116	36.65	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	55014	89.03	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39099	60.06	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39995	96.6	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	57260	0	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39146	50.239	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39147	5.31	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area

Effective Date	Year	Offtake Number	Volume	Operational System	Operational Section	ROL Zone	Billing Group
30-Sep-04	2004	49021	65.66	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	57330	178.86	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	42723	20.25	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	37873	59.6	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	37872	18.5	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	37871	0	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	35506	49.41	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	55069	13.365	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	19699	21.92	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	17364	109.45	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	42729	2.372	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	54956	0.08	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	54979W	0	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	48939	59.46	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	96070	14.76	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	4755	47.145	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39127	10.533	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39114	31.036	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39113	55.54	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39111	21.922	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	4374	86.75	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	13812	6.54	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	42777	11.68	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39197 BHWSS	50.213	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	4653	4.31	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	HS020W1	122.3	Haughton	HMC	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HH030R1	26.371	Haughton	HMC REG 10 518ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS040R1	134.54	Haughton	HMC REG 14 345ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS172R2	96.51	Haughton	HMC REG 14 345ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS172R1	138.54	Haughton	HMC REG 14 345ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS021R2	117.15	Haughton	HMC REG 14 345ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS021R1	152.39	Haughton	HMC REG 14 345ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS020R2	67.22	Haughton	HMC REG 15 259ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS005R1	234.64	Haughton	HMC REG 15 259ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HLBR1	137.28	Haughton	HMC REG 89 138ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL095R1	516	Haughton	HMC REG 89 138ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HLCR1	0	Haughton	HMC REG 89 138ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HLDR1	0.02	Haughton	HMC REG 89 138ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HLAR2	6.873	Haughton	HMC REG 89 138ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HLAR1	22.474	Haughton	HMC REG 89 138ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HLER1	74.07	Haughton	HMC REG 95 103ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL059R1	308.24	Haughton	HMC REG 95 103ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL060R1	214.13	Haughton	HMC REG 95 103ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HLGR1	88.45	Haughton	HMC REG 95 103ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL094R1	52.94	Haughton	HMC REG 95 103ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL058R2	0	Haughton	HMC REG 95 103ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL058R1	77.57	Haughton	HMC REG 95 103ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL067R1	50.13	Haughton	HMC REG 96 76ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL054R1	110.22	Haughton	HMC REG 96 76ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL099R1	46.042	Haughton	HMC REG 96 76ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL056R1	116.95	Haughton	HMC REG 96 76ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL100R1	9.398	Haughton	HMC REG 96 76ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL055R1	47.343	Haughton	HMC REG 96 76ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL096R1	102.344	Haughton	HMC REG 96 76ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL057R1	73.19	Haughton	HMC REG 96 76ML	Burdekin River 64km - 58km	BH Channel

Effective Date	Year	Offtake Number	Volume	Operational System	Operational Section	ROL Zone	Billing Group
30-Sep-04	2004	HS21FR1	35.342	Haughton	HS21 PIPELINE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS21ER1	113.75	Haughton	HS21 PIPELINE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS21DR1	76.71	Haughton	HS21 PIPELINE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS21CR1	38.99	Haughton	HS21 PIPELINE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS21AR1	46.72	Haughton	HS21 PIPELINE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS21BR1	54.62	Haughton	HS21 PIPELINE	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP60W1	40.38	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP61W1	74.77	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP62W1	65.48	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP50W1	10.19	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP51W1	115.55	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP53W1	13.73	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP54W1	107.36	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP63W1	43.04	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP64W1	95.09	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP65W1	40.31	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BMP52W1	4.56	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	C2/10	0.029	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	CLARE HALL	0.293	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C6/10	0.204	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water Staff)
30-Sep-04	2004	C1/10	0.141	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water Staff)
30-Sep-04	2004	STORE	0.005	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C9/9	0.364	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C5/10	0.125	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water Staff)
30-Sep-04	2004	C3/10	0.038	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C4/10	0.001	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water Staff)
30-Sep-04	2004	C4-5/9	0.105	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C11/9	0.239	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	P25	0	Clare	Line 1/1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	RES1	0.065	Clare	Line 1/1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	RES2	0.163	Clare	Line 1/1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	10523/1	0.333	Clare	Line 1/1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	POL/RES	0.015	Clare	Line 1/1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	CTW POLICE	0.052	Clare	Line 1/1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C10/13	0	Clare	Line 1/1	D/S of Clare Weir	BH Commercial (Town Water Staff)
30-Sep-04	2004	CLARE POOL	1.007	Clare	Line 2	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C7/7	0.164	Clare	Line 2	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C8/7	0.316	Clare	Line 2	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C6/7	0	Clare	Line 2	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C14/6	0.029	Clare	Line 2	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	P110	0.018	Clare	Line 2	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C13/6	0	Clare	Line 2	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C9/7	0	Clare	Line 2	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C4/7	0.254	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C5/7	0.03	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C10/7	0	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C3/7	0	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C7/6	0	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C14/7	0.123	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C16/7	0.4	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C2/7	0.36	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C11/6	0.019	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C11/6A	0.124	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C13/7	0	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water Staff)
30-Sep-04	2004	C11/7	0.003	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water Staff)

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30-Sep-04	2004	C10/6	0.018	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C10/10	0.215	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C12/10	0.001	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water Staff)
30-Sep-04	2004	CTW RECRES1	0.122	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	CTW RECRES	0	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	CLARE RESIDENCE	0.126	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	CTW CLARE SMQ	0.028	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	SCH	0.308	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	SCH01	0.754	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	SCH02	0.422	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	CTW SCHAB	0.436	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C9/10	0.222	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water Staff)
30-Sep-04	2004	C8/10	0.153	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	C7/10	0.172	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water Staff)
30-Sep-04	2004	C1/14	0.055	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
30-Sep-04	2004	MTW L2 M9104	0.165	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
30-Sep-04	2004	CHURCH	0	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
30-Sep-04	2004	MA160W1	5.51	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
30-Sep-04	2004	MA053W1	3.7	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
30-Sep-04	2004	MA047W1	49.04	Millaroo	Millaroo A main check 45	Burdekin River 90km - 64km	BH Channel
30-Sep-04	2004	MB081W1	20.61	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
30-Sep-04	2004	MB082W1	6.08	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
30-Sep-04	2004	MB130W1	10.07	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
30-Sep-04	2004	MB083W1	5.97	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
30-Sep-04	2004	MA022W1	36	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
30-Sep-04	2004	HS003R1	10.111	Haughton	REG RH5	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HS079R2	71.76	Haughton	REG RH5	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BM250W1	188	Barratta	REG44 109ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BM268W1	112	Barratta	REG48 56ML	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	EL57252	136	Elliot	Regulator 54	Burdekin River 58km - 50.3km	BH Channel
30-Sep-04	2004	BJ067W1	237.3	Barratta	Regulator 71	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ051R1	57.3	Barratta	Regulator 71	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ072W1	42.88	Barratta	Regulator 72	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ066R3	99.38	Barratta	Regulator 72	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ066R1	123.41	Barratta	Regulator 72	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ066R4	0.02	Barratta	Regulator 72	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ074R1	25.34	Barratta	Regulator 73	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ003R1	0.695	Barratta	Regulator 73	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ091R2	0	Barratta	Regulator 73	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ091R1	91.4	Barratta	Regulator 73	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ073R1	36.05	Barratta	Regulator 73	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ070W1	226.9	Barratta	Regulator 74	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ071W1	249.72	Barratta	Regulator 74	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ075R1	69.99	Barratta	Regulator 75	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ077W1	54.7	Barratta	Regulator 75	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ059R3	80.3	Barratta	Regulator 77	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ059R2	0.02	Barratta	Regulator 77	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ059R1	0	Barratta	Regulator 77	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ087W1	84.43	Barratta	Regulator 78	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ062W2	0	Barratta	Regulator 79	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ062W4	0	Barratta	Regulator 79	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ062W3	62.49	Barratta	Regulator 79	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ062W1	25.68	Barratta	Regulator 79	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ062R1	120.03	Barratta	Regulator 80	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ064W1	144.27	Barratta	Regulator 80	Burdekin River 64km - 58km	BH Channel

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30-Sep-04	2004	BJ063W4	42.11	Barratta	Regulator 80	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ063W2	99.85	Barratta	Regulator 80	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ063W1	41.45	Barratta	Regulator 80	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ063W3	52.79	Barratta	Regulator 80	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	BJ065W1	28.71	Barratta	Regulator 81	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	100870	146.804	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (NQ Water)
30-Sep-04	2004	HL102R1	9.801	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL103R1	16.964	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL073R1	43.06	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL074R1	20.471	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL105R1	6.163	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL068R1	99.508	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL071R1	53.873	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL070R1	0	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL072R1	71.962	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL101R1	16.538	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL107R1	29.16	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL104R1	2.523	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	HL069R1	46.8	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
30-Sep-04	2004	39676	1.879	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	38403	26.853	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	49007	3.846	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	57279	21.88	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	96096/1	0	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	58122	44.53	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	49083	30.35	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	39080	157.87	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	52422	13.35	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004	52423	1.818	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
30-Sep-04	2004		-16.961	Townsville Thuringowa Pipeline			
2-Oct-04	2004	54936B	1151.51	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
2-Oct-04	2004	MB146W1	0	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
13-Oct-04	2004	DA020W1	0.72	Dalbeg	CHECK 9	Burdekin Falls Dam & Burdekin River	BH Channel
31-Oct-04	2004	RIPARIAN - SOUTH	0	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Oct-04	2004	MCDOWELLS PUMP 2	2036	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Oct-04	2004	MCDOWELLS PUMP 3	2045	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Oct-04	2004	ROCKS	2464	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Oct-04	2004	PC NO. 2	9324	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Oct-04	2004	RITA ISLAND	1032	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Oct-04	2004	RONCATO	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Oct-04	2004	Riparian	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Oct-04	2004	Warrens Gully	4419	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Oct-04	2004	MCDOWELLS PUMP 1	1393	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Oct-04	2004	D/River	801	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Oct-04	2004	100870	31.69	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (NQ Water)
10-Nov-04	2004	BN004W1	0	Barratta	BMC REG 28	Burdekin River 64km - 58km	BH Channel
17-Nov-04	2004	100870	12.663	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (NQ Water)
20-Nov-04	2004	D/River	589	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
24-Nov-04	2004	MA213W1	100	Millaroo	Channel 2 Reg 104	Burdekin River 90km - 64km	BH Channel
24-Nov-04	2004	DA067W1	21.14	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
26-Nov-04	2004	54936B	150.2	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
29-Nov-04	2004	BN048W1	30.6	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
30-Nov-04	2004	RIPARIAN - SOUTH	0	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
30-Nov-04	2004	MCDOWELLS PUMP 2	1988	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
30-Nov-04	2004	MCDOWELLS PUMP 3	2006	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)

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30-Nov-04	2004	ROCKS	4327	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
30-Nov-04	2004	PC NO. 2	10654	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
30-Nov-04	2004	RITA ISLAND	1464	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
30-Nov-04	2004	RONCATO	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
30-Nov-04	2004	Riparian	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
30-Nov-04	2004	Warrens Gully	4635	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
30-Nov-04	2004	MCDOWELLS PUMP 1	2005	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
30-Nov-04	2004	D/River	552	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
30-Nov-04	2004	DA005W2	15.89	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
1-Dec-04	2004	HS060R1	72.53	Haughton	H16 REG 82 55ML	Burdekin River 64km - 58km	BH Channel
8-Dec-04	2004	CB056W1	0.22	Clare	CHECK53	Burdekin River 58km - 50.3km	BH Channel
12-Dec-04	2004		170	Townsville Thuringowa Pipeline			
12-Dec-04	2004		1232.64	Townsville Thuringowa Pipeline			
12-Dec-04	2004		-1232.64	Townsville Thuringowa Pipeline			
12-Dec-04	2004		-170	Townsville Thuringowa Pipeline			
13-Dec-04	2004	BJ060W1	159.81	Barratta	BA8 Channel	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BJ057W3	29.99	Barratta	BA8 Offtake	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BJ057W2	149.93	Barratta	BA8 Offtake	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BJ057W1	77.26	Barratta	BA8 Offtake	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM246R2	51.56	Barratta	Barratta	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BJ050R1	170.83	Barratta	BARRATTA MAIN	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM244R2	89.38	Barratta	BARRATTA MAIN (Butterfly valve)	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM246R3	100.98	Barratta	BARRATTA MAIN (Butterfly valve)	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM244R1	152.11	Barratta	BMC Reg 16	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM244W1	334.5	Barratta	BMC Reg 16	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM243W1	368.53	Barratta	BMC Reg 16	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM242W1	171.29	Barratta	BMC REG 18	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM241R1	12.83	Barratta	BMC REG 18	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM240W1	113.17	Barratta	BMC REG 18	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM240R1OBSOLETE	0	Barratta	BMC REG 19	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM240W2	13.28	Barratta	BMC REG 19	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM240R2	434.92	Barratta	BMC REG 19	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM278W1	421.26	Barratta	BMC REG 20	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM142W1	16.32	Barratta	BMC REG 20	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM276W1	467.3	Barratta	BMC REG 20	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM140W1	35.33	Barratta	BMC REG 20	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM275W2	39.11	Barratta	BMC REG 20	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM275W1	214.37	Barratta	BMC REG 20	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM210W1	5.09	Barratta	BMC REG 20	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM277W1	313.49	Barratta	BMC REG 20	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM211W1	29.83	Barratta	BMC REG 20	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM284W1	392.65	Barratta	BMC REG 21	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM141W1	22.13	Barratta	BMC REG 21	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BN17W1	62.12	Barratta	BMC REG 22	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM193W3	83.72	Barratta	BMC REG 22	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM193W2	179.27	Barratta	BMC REG 22	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BM193R2	60.52	Barratta	BMC REG 22	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BN17W3	173.33	Barratta	BMC REG 23	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BN17W2	112.49	Barratta	BMC REG 23	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BN004R2OBSOLETE	0	Barratta	BMC REG 23	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BN004W1	106.74	Barratta	BMC REG 28	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BN012W2	29.52	Barratta	BMC REG 29	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BN011W1	228.86	Barratta	BMC REG 29	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BN005W1	169.96	Barratta	BMC REG 29	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BN008W1	102.8	Barratta	BMC REG 29	Burdekin River 64km - 58km	BH Channel

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13-Dec-04	2004	BN007W1	27.99	Barratta	BMC REG 29	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	MA024W2	1.37	Millaroo	Channel 2 Reg 104	Burdekin River 90km - 64km	BH Channel
13-Dec-04	2004	MA023W2	0	Millaroo	Channel 2 Reg 104	Burdekin River 90km - 64km	BH Channel
13-Dec-04	2004	MA210R1	0	Millaroo	Channel 2 Reg 104	Burdekin River 90km - 64km	BH Channel
13-Dec-04	2004	MA025W2	12.3	Millaroo	Channel 2 Reg 104	Burdekin River 90km - 64km	BH Channel
13-Dec-04	2004	MA026W2	0	Millaroo	Channel 2 Reg 104	Burdekin River 90km - 64km	BH Channel
13-Dec-04	2004	MA211W1	69.04	Millaroo	Channel 2 Reg 104	Burdekin River 90km - 64km	BH Channel
13-Dec-04	2004	MA213W1	76.94	Millaroo	Channel 2 Reg 104	Burdekin River 90km - 64km	BH Channel
13-Dec-04	2004	MA212W1	91.04	Millaroo	Channel 2 Reg 104	Burdekin River 90km - 64km	BH Channel
13-Dec-04	2004	MA003W1	0	Millaroo	Channel 2 Reg 106	Burdekin River 90km - 64km	BH Channel
13-Dec-04	2004	MA003W2	0	Millaroo	Channel 2 Reg 106	Burdekin River 90km - 64km	BH Channel
13-Dec-04	2004	MA214R1	159.45	Millaroo	Channel 2 Reg 107	Burdekin River 90km - 64km	BH Channel
13-Dec-04	2004	MA217R1	111.52	Millaroo	Channel 2 Reg 107	Burdekin River 90km - 64km	BH Channel
13-Dec-04	2004	MA216R1	142.93	Millaroo	Channel 2 Reg 107	Burdekin River 90km - 64km	BH Channel
13-Dec-04	2004	MA215R1	425.36	Millaroo	Channel 2 Reg 107	Burdekin River 90km - 64km	BH Channel
13-Dec-04	2004	BM101W1	3.43	Clare	Clare	D/S of Clare Weir	BH Channel
13-Dec-04	2004	BN128W1	83.8	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BJ058R1	232.03	Barratta	Regulator 76	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BJ061R1	258.89	Barratta	Regulator 76	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BJ060R1	284.77	Barratta	Regulator 76	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BJ059R3	175.39	Barratta	Regulator 77	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BJ059R2	71.44	Barratta	Regulator 77	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BJ059R1	38.27	Barratta	Regulator 77	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BJ058R2	51.29	Barratta	Regulator 77	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BJ061R2	172.17	Barratta	Regulator 77	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BJ087W1	104.22	Barratta	Regulator 78	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BJ086R2	77.61	Barratta	Regulator 78	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BJ086R1	228.29	Barratta	Regulator 78	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BJ064W1	296.44	Barratta	Regulator 80	Burdekin River 64km - 58km	BH Channel
13-Dec-04	2004	BJ065W1	51.41	Barratta	Regulator 81	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN047R1	231.53	Barratta	BA 5/2 REG 70 26ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN047W1OBSOLETS	0	Barratta	BA 5/2 REG 70 26ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN046W1	128.83	Barratta	BA 5/2 REG 70 26ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN045R1	365.52	Barratta	BA 5/2 REG 70 26ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN17W9	37.4	Barratta	BA5 REG 60 198 ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN17W8	0.01	Barratta	BA5 REG 60 198 ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN030W1	336.42	Barratta	BA5/1 OFFTAKE	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN052R1	340.93	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN051W3	0	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN051W2	0.01	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN051W1	0	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN055R1	130.16	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN054W1	165.93	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN054R2	29.82	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN053W1	21.06	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN048W3	96.84	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN048W2	152.22	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN048W1	11.79	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN049R1	83.41	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN046R1	263.01	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN017-100OBSOLETE	0	Barratta	Barratta	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN144R2	168.48	Barratta	Barratta	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN144R1	90.65	Barratta	Barratta	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN055W1	0.01	Barratta	Barratta	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN004R1	0	Barratta	BMC REG 23	Burdekin River 64km - 58km	BH Channel

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14-Dec-04	2004	BN032W1	152.66	Barratta	BMC REG 25	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN044W1	121.17	Barratta	BMC REG 26	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN033W1	126.02	Barratta	BMC REG 26	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN043W1	99.41	Barratta	BMC REG 26	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	6B	0.01	Barratta	BMC Reg 27	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	5B	249.61	Barratta	BMC Reg 27	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN009R1	80	Barratta	BMC REG 28	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN001R1	142.91	Barratta	BMC REG 28	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN009R2	90.42	Barratta	BMC REG 28	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	DA087W1	10.68	Dalbeg	CHECK 20	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA088W1	10.04	Dalbeg	CHECK 20	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA086W1	22.57	Dalbeg	CHECK 20	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA054W1	23.67	Dalbeg	CHECK 9	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA014W1	54.27	Dalbeg	CHECK 9	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA014W2	55.08	Dalbeg	CHECK 9	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA020W1	68.88	Dalbeg	CHECK 9	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA013W1	107.66	Dalbeg	CHECK 9	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA008W1	0	Dalbeg	CHECK 9	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA013W3	51.72	Dalbeg	CHECK 9	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	BN136R1	25.262	Clare	Clare	Burdekin River 58km - 50.3km	BH Channel
14-Dec-04	2004	DA009W1	3.35	Dalbeg	DA CH 1	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA015W2	24.65	Dalbeg	DA CH 1/1 OFFTAKE	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA015W1	21.7	Dalbeg	DA CH 1/1 OFFTAKE	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA009W2	17.58	Dalbeg	DA CH 1/1 OFFTAKE	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA012W3	22.97	Dalbeg	DA CH 1/1 OFFTAKE	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA012W2	31	Dalbeg	DA CH 1/1 OFFTAKE	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA012W1	0.59	Dalbeg	DA CH 1/1 OFFTAKE	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA084W1	17.6	Dalbeg	DA CH 1/3 OFFTAKE	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA085W1	28.12	Dalbeg	DA CH 1/3 OFFTAKE	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA006W2	10.24	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA006W1	23.79	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA007W2	30.49	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA007W1	10.81	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA011W1	47.77	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA002W1	55.14	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA004W1	23.21	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA003W1	81.17	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA010W3	25.7	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA010W2	12.95	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA010W1	6.32	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA005W1	62.75	Dalbeg	Dalbeg A Main CHECK 2	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA069W1	16.25	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA071W1	15.569	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA068W1	16.64	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA067W1	8.61	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA062W1	16.32	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA064W1	22.66	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA063W1	37.35	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA061W1	14.98	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA066W1	10.49	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA070W1	44.868	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	DA065W1	0	Dalbeg	DALBEG A RELIFT	Burdekin Falls Dam & Burdekin River	BH Channel
14-Dec-04	2004	BN17W5A	450.59	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN17W7	162.18	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN17W6	77.58	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel

Effective Date	Year	Offtake Number	Volume	Operational System	Operational Section	ROL Zone	Billing Group
14-Dec-04	2004	BN17W4	256.15	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN031W1	384.19	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	MB118W2	0	Millaroo	MB CH 16	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MB084W1	30.32	Millaroo	MB CH 16	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA009W1	7.69	Millaroo	Millaroo A main check 175	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA040W1	41.32	Millaroo	Millaroo A main check 35	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA036W1	59.1	Millaroo	Millaroo A main check 35	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA039W1	51.54	Millaroo	Millaroo A main check 35	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA037W1	47.49	Millaroo	Millaroo A main check 35	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA041W1	47.16	Millaroo	Millaroo A main check 40	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA137W1	16.77	Millaroo	Millaroo A main check 40	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA042W1	61.57	Millaroo	Millaroo A main check 40	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA024W1	25.01	Millaroo	Millaroo A main Reg 108	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA023W1	20.9	Millaroo	Millaroo A main Reg 108	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA028W1	39.93	Millaroo	Millaroo A main Reg 108	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA035W1	28.51	Millaroo	Millaroo A main Reg 108	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA025W1	34.04	Millaroo	Millaroo A main Reg 108	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA030W1	53.44	Millaroo	Millaroo A main Reg 108	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA026W1	37.78	Millaroo	Millaroo A main Reg 108	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA029W1	20.4	Millaroo	Millaroo A main Reg 108	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA027W1	36.88	Millaroo	Millaroo A main Reg 108	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MB130W1	14.73	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MB083W1	38.3	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MB082W1	38.35	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MB081W1	67.06	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MB079W1	15.57	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MB136W1	12.63	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MB135W1	29.16	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MB134W1	8.14	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MB118W1	1.428	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MB146W1	1.6	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MB131W1	11.35	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MB132W1	21.35	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MB080W2	36.32	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MB080W1	29.02	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MB133W1	9.68	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MB129W1	24.54	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA209R1	0	Millaroo	Millaroo Balancing Storage	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA019W1	41.21	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA022W1	0	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA021W1	14.493	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA020W1	17.62	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	MA020W2	36.52	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
14-Dec-04	2004	BN042W1	138.54	Barratta	REG 61 138ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN054R1	61.96	Barratta	REG 63 77ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN053R1	326.58	Barratta	REG 63 77ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN057R1	0	Barratta	REG64	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN039W1	0.5	Barratta	REG65 103ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN035W1	51.43	Barratta	REG65 103ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN035W2	143.74	Barratta	REG65 103ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN040W1	0	Barratta	REG65 103ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN040R1	286.89	Barratta	REG65 103ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN034R1	351.75	Barratta	REG66 95ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN038W1	237.4	Barratta	REG66 95ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN035R1	94.33	Barratta	REG66 95ML	Burdekin River 64km - 58km	BH Channel

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14-Dec-04	2004	BN063W1	0	Barratta	REG67 77ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN013W1	7.85	Barratta	REG68 60ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN037R1OBSOLETE	0	Barratta	REG68 60ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN016W1	148.18	Barratta	REG68 60ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN015W1	103.47	Barratta	REG68 60ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN014W1	127.93	Barratta	REG68 60ML	Burdekin River 64km - 58km	BH Channel
14-Dec-04	2004	BN018R1	140.26	Barratta	REG69 16ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM270W1	368.14	Barratta	BA1 REG 41 23ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM256R1	390.52	Barratta	BA1/1 OFFTAKE	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM246R1	197.15	Barratta	BA1/1 OFFTAKE	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ051W1	204.22	Barratta	BA9 Offtake	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ069W1	190.69	Barratta	BA9/1 Offtake	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM280R2	115.13	Barratta	Barratta	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BN002R1	186.27	Barratta	BMC REG 28	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BN010W1	312.62	Barratta	BMC REG 28	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BN003R1	176.52	Barratta	BMC REG 28	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ078W1	155.92	Barratta	BMC REG 31	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ054W1	48.94	Barratta	BMC REG 31	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ053W1	44.72	Barratta	BMC REG 31	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ052R1	327.86	Barratta	BMC REG 31	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ055W1	112.94	Barratta	BMC REG 32	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ054R1	197.26	Barratta	BMC REG 32	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ079W1	221.93	Barratta	BMC REG 32	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ080W1	259.124	Barratta	BMC REG 33	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ056R1	194.28	Barratta	BMC REG 33	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ057AW1	173.87	Barratta	BMC REG 33	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ089R1	205.59	Barratta	BMC REG 34	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ080R5	240.52	Barratta	BMC REG 34	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ080R4	331.72	Barratta	BMC REG 34	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ080R3	187.23	Barratta	BMC REG 34	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ080R2	152.79	Barratta	BMC REG 34	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ080R1	0	Barratta	BMC REG 34	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ090R1	361.81	Barratta	BMC REG 34	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	52529	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
15-Dec-04	2004	38651	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
15-Dec-04	2004	58109	424.72	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
15-Dec-04	2004	5702	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
15-Dec-04	2004	6003	38.888	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
15-Dec-04	2004	54936A	384.8	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
15-Dec-04	2004	54936B	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
15-Dec-04	2004	6139	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
15-Dec-04	2004	5291	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
15-Dec-04	2004	5878	55.68	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
15-Dec-04	2004	49100	0.048	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
15-Dec-04	2004	39856W	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
15-Dec-04	2004	5294	36.523	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
15-Dec-04	2004	5292	11.366	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
15-Dec-04	2004	54984W	201.96	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
15-Dec-04	2004	6516	166.42	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
15-Dec-04	2004	55058B	142.19	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
15-Dec-04	2004	55058	190.22	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
15-Dec-04	2004	6498	152.44	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
15-Dec-04	2004	MA090W2	64.98	Millaroo	Ch 13/1 check 157	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA158W1	30.27	Millaroo	Ch 13/1 check 157	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA088W1	30.33	Millaroo	Ch 13/1 check 157	Burdekin River 90km - 64km	BH Channel

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15-Dec-04	2004	MB075W1	0	Millaroo	CH 15/5	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	DB074W1	10.43	Dalbeg	Channel 2/6 offtake	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB040W1	90.06	Dalbeg	Channel 2/6 offtake	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB082W1	18.34	Dalbeg	Channel 2/6 offtake	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB017W2	28.98	Dalbeg	Check 18	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB017W1	13.05	Dalbeg	Check 18	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB016W1	27.25	Dalbeg	Check 18	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB018W1	23.71	Dalbeg	Check 18	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB072W1	27.19	Dalbeg	Check 27	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB025W1	0	Dalbeg	Check 27	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB075W1	21.83	Dalbeg	Check 27	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB026W1	0	Dalbeg	Check 27	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB024W1	45.56	Dalbeg	Check 27	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB031W1	88.31	Dalbeg	CHECK 28	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB039W1	99.62	Dalbeg	CHECK 28	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB030W1	108.29	Dalbeg	CHECK 28	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB029W1	0	Dalbeg	CHECK 28	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB036W1	46	Dalbeg	Check 41	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB035W1	26.58	Dalbeg	Check 41	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB041W1	86.2	Dalbeg	Check 41	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB038W1	46.6	Dalbeg	Check 41	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB037W1	73.42	Dalbeg	Check 41	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB034W1	21.36	Dalbeg	Check 41	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB033W1	75.59	Dalbeg	Check 41	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB032W1	60.76	Dalbeg	Check 41	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	MB065W2	0	Millaroo	CHECK 71	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB072W3	0	Millaroo	CHECK 71	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB072W2	4.52	Millaroo	CHECK 71	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB072W1	5.38	Millaroo	CHECK 71	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB074W1	40.54	Millaroo	CHECK 71	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB073W3	54.17	Millaroo	CHECK 71	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB073W1	0	Millaroo	CHECK 71	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	DB027W1	42.28	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB047W2	27.83	Dalbeg	DB CH 3	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB047W1	30.63	Dalbeg	DB CH 3	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB073W1	93.14	Dalbeg	DB CH 3	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB081W1	18.44	Dalbeg	DB CH 3	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB048W1	47.628	Dalbeg	DB CH 4	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB057W1	22.63	Dalbeg	DB CH 4	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB049W2	44.633	Dalbeg	DB CH 4	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB049W1	81.06	Dalbeg	DB CH 4	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB093W1	14.44	Dalbeg	DB CH5	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB094W1	14.48	Dalbeg	DB CH5	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB042W1	71.6	Dalbeg	DB Main from DBCH 3 to DBCH 4	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB043W1	68.14	Dalbeg	DB Main from DBCH 3 to DBCH 4	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB044W1	49.04	Dalbeg	DB Main from DBCH 3 to DBCH 4	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB045W1	141.45	Dalbeg	DB Main from DBCH 3 to DBCH 4	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB046W1	44.38	Dalbeg	DB Main from DBCH 3 to DBCH 4	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB052W1	30.88	Dalbeg	DB Main from DBCH 4 to end	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB052W2	17.98	Dalbeg	DB Main from DBCH 4 to end	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB053W1	28.59	Dalbeg	DB Main from DBCH 4 to end	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB050W1	35.2	Dalbeg	DB Main from DBCH 4 to end	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB051W2	2.67	Dalbeg	DB Main from DBCH 4 to end	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB051W1	67.79	Dalbeg	DB Main from DBCH 4 to end	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB028W1	28.5	Dalbeg	DBCH 2	Burdekin Falls Dam & Burdekin River	BH Channel

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15-Dec-04	2004	DB023W2	68.34	Dalbeg	DBCH 2	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB023W1	59.1	Dalbeg	DBCH 2	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB019W1	39.08	Dalbeg	DBCH 2	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB022W2	57.23	Dalbeg	DBCH 2	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	DB022W1	7.98	Dalbeg	DBCH 2	Burdekin Falls Dam & Burdekin River	BH Channel
15-Dec-04	2004	EL046W1	125.54	Elliot	E1 Channel.	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL047W2	0	Elliot	E1 Channel.	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL047W1	29.31	Elliot	E1 Channel.	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL049W1	60.682	Elliot	E1 Channel.	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL102W1	112.15	Elliot	E1/1 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL056W1	299.92	Elliot	E2 Pipeline Offtake	Burdekin River 64km - 58km	z (obsolete) BH Commercial (Leased Customers)
15-Dec-04	2004	EL043W1	104.14	Elliot	Gate 56	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL042W1	514.24	Elliot	Gate 57	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL043W2	86.24	Elliot	Gate 57	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	MB071W2	29.88	Millaroo	MB CH 15/3	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB077W1	30.91	Millaroo	MB CH 15/3	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB085W2	44.74	Millaroo	MB CH 15/3	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB085W1	39.72	Millaroo	MB CH 15/3	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB086W2	57.77	Millaroo	MB CH 15/3	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB086W1	11.13	Millaroo	MB CH 15/3	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB076W2	4.75	Millaroo	MB CH 15/3	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB076W1	47.36	Millaroo	MB CH 15/3	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB078W1	40.26	Millaroo	MB CH 15/3	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA052W1	90.6	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA090W4	17.86	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA090W3	14.85	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA092W3	13.88	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA092W2	16.93	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA092W1	0	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA162W1	0	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA160W1	0	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA166W1	9.93	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA091W1	0	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA091W2	0	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA159W1	0	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA053W1	24.91	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA163W1	9.05	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA165W1	15.83	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA164W1	27.7	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA161W1	26.56	Millaroo	Millaroo A Ch 13 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA087W1	0.04	Millaroo	Millaroo A Ch 13/1 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA157W1	25.72	Millaroo	Millaroo A Ch 13/1 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA114W1	20.46	Millaroo	Millaroo A Ch 13/1 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA031W2	32.44	Millaroo	Millaroo A Ch 3	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA031W1	32.78	Millaroo	Millaroo A Ch 3	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA105W1	38.82	Millaroo	Millaroo A Ch 3	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA033W1	87.03	Millaroo	Millaroo A Ch 3	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA032W1	21.42	Millaroo	Millaroo A Ch 3	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA034W2	30.63	Millaroo	Millaroo A Ch 3	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA034W1	41.35	Millaroo	Millaroo A Ch 3	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA038W2	48.64	Millaroo	Millaroo A Ch 4	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA038W1	6.22	Millaroo	Millaroo A Ch 4	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA045W1	45.98	Millaroo	Millaroo A main check 175	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA004W2	26.6	Millaroo	Millaroo A main check 175	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA175W2	71.79	Millaroo	Millaroo A main check 175	Burdekin River 90km - 64km	BH Channel

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15-Dec-04	2004	MA175W1	71.51	Millaroo	Millaroo A main check 175	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA175W4	22.07	Millaroo	Millaroo A main check 175	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA175W3	24.65	Millaroo	Millaroo A main check 175	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA004W3	29.73	Millaroo	Millaroo A main check 175	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA004W1	78.12	Millaroo	Millaroo A main check 175	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA007W1	108.94	Millaroo	Millaroo A main check 40	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA008W1	39.41	Millaroo	Millaroo A main check 40	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA170W1	35.89	Millaroo	Millaroo A main check 45	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA050W1	23.68	Millaroo	Millaroo A main check 45	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA049W1	68.21	Millaroo	Millaroo A main check 45	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA047W1	27.54	Millaroo	Millaroo A main check 45	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA046W1	33.11	Millaroo	Millaroo A main check 45	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA048W1	48.15	Millaroo	Millaroo A main check 45	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA055W1	34.63	Millaroo	Millaroo A main check 50	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA051W2	0	Millaroo	Millaroo A main check 50	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA051W1	17.58	Millaroo	Millaroo A main check 50	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB061W1	50.092	Millaroo	Millaroo B Ch 14	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB113W1	34.734	Millaroo	Millaroo B Ch 14	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB062W1	31.46	Millaroo	Millaroo B Ch 14	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB060W2	26.037	Millaroo	Millaroo B Ch 14	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB060W1	33.893	Millaroo	Millaroo B Ch 14	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB059W1	53.367	Millaroo	Millaroo B Ch 14	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB071W1	40.79	Millaroo	Millaroo B Ch 15 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB070W1	43.74	Millaroo	Millaroo B Ch 15 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB064W1	26.44	Millaroo	Millaroo B Ch 15 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB065W1	25.31	Millaroo	Millaroo B Ch 15 offtake	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB063W1	61.11	Millaroo	Millaroo B Main check 55	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB057W2	23.58	Millaroo	Millaroo B Main check 55	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB057W1	0	Millaroo	Millaroo B Main check 55	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB055W2	0	Millaroo	Millaroo B Main check 55	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB069W1	44.96	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB068W1	53.24	Millaroo	Millaroo B Main CHECK 80M	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB166W2	100.08	Millaroo	Millaroo B Main from Ch 14 to Ch 15	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MB056W1	99.19	Millaroo	Millaroo B Pump Station	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA125W2	127.45	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA126W1	39.967	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA125W1	0	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA168W1	29.598	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA167W1	24.565	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA122W1	14.497	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA120W1	37.229	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA121W1	38.055	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA017W1	31.039	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA127W1	32.978	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA123W1	0	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA119W1	12.007	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA016W1	41.113	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA124W1	0	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA089W1	42.445	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	MA015W1	45.231	Millaroo	Millaroo Relift Pump Station	Burdekin River 90km - 64km	BH Channel
15-Dec-04	2004	BM264R1	4.5	Barratta	REG 47 86ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM265W1	311.45	Barratta	REG 47 86ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM262R1	68.41	Barratta	REG38 130ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM264W1	70.04	Barratta	REG39 130ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM263W1	0	Barratta	REG39 130ML	Burdekin River 64km - 58km	BH Channel

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15-Dec-04	2004	BM263R1	154.36	Barratta	REG39 130ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM263W2	29.18	Barratta	REG39 130ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM271W1	612.81	Barratta	REG40 32ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM248W1	345.61	Barratta	REG42 137ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM247R1	114.64	Barratta	REG42 137ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM247W1	0.63	Barratta	REG42 137ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM255W1	571.37	Barratta	REG42 137ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM254R1	322	Barratta	REG43 109ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM253W1	118.71	Barratta	REG43 109ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM249W1	333.66	Barratta	REG43 109ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM250W1	191.41	Barratta	REG44 109ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM251W1	335.63	Barratta	REG45 109ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM283W1	457.113	Barratta	REG46 109ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM282W2-Obsolete	139.82	Barratta	REG46 109ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM282W1	170.97	Barratta	REG46 109ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM281W2	20.63	Barratta	REG46 109ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM281W1	215.92	Barratta	REG46 109ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM280R1	226	Barratta	REG46 109ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM252W1	288.35	Barratta	REG46 109ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM268W1	0	Barratta	REG48 56ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM267W1	0	Barratta	REG48 56ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM273R2	34.47	Barratta	REG48 56ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM273R1	47.24	Barratta	REG48 56ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM266W1	222.12	Barratta	REG48 56ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BM272W1	399.61	Barratta	REG48 56ML	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	EL048T1	26.94	Elliot	Regulator 49	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL048R1	0	Elliot	Regulator 49	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL049R1	141.76	Elliot	Regulator 49	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL045W1	193.47	Elliot	Regulator 51	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL046W2	65.77	Elliot	Regulator 51	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL046R1	71.52	Elliot	Regulator 51	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL050W1	40.01	Elliot	Regulator 51	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL050W2	45.03	Elliot	Regulator 51	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL051R1	71.63	Elliot	Regulator 52	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL044R1	58.17	Elliot	Regulator 52	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL041W1	0.11	Elliot	Regulator 52	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL051R2	0	Elliot	Regulator 52	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL050R1	28.75	Elliot	Regulator 52	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL044R3	120.64	Elliot	Regulator 53	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL044R2	108	Elliot	Regulator 53	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL041W3	154.55	Elliot	Regulator 53	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL041W2	106.74	Elliot	Regulator 53	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL387R1	125.04	Elliot	Regulator 54	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL57252	135.95	Elliot	Regulator 54	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL96078	58.64	Elliot	Regulator 54	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL54977	185.93	Elliot	Regulator 54	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL040R1	43.66	Elliot	Regulator 54	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL100R1	51.54	Elliot	Regulator 55	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL102R2	22.19	Elliot	Regulator 55	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	EL102R1	142.86	Elliot	Regulator 55	Burdekin River 58km - 50.3km	BH Channel
15-Dec-04	2004	BJ067W1	374.31	Barratta	Regulator 71	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ051R1	104.45	Barratta	Regulator 71	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ066R4	109.72	Barratta	Regulator 72	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ072W1	134.6	Barratta	Regulator 72	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ066R3	117.94	Barratta	Regulator 72	Burdekin River 64km - 58km	BH Channel

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15-Dec-04	2004	BJ066R1	203.02	Barratta	Regulator 72	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ074R1	35.32	Barratta	Regulator 73	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ003R1	0.552	Barratta	Regulator 73	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ073R1	96.51	Barratta	Regulator 73	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ091R2	0	Barratta	Regulator 73	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ091R1	143.07	Barratta	Regulator 73	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ070W1	319.73	Barratta	Regulator 74	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ071W1	595.54	Barratta	Regulator 74	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ075R1	129.68	Barratta	Regulator 75	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ077W1	98.3	Barratta	Regulator 75	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ062R1	129.99	Barratta	Regulator 80	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ063W4	93.93	Barratta	Regulator 80	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ063W3	73.6	Barratta	Regulator 80	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ063W2	187.3	Barratta	Regulator 80	Burdekin River 64km - 58km	BH Channel
15-Dec-04	2004	BJ063W1	70.26	Barratta	Regulator 80	Burdekin River 64km - 58km	BH Channel
16-Dec-04	2004	96050	399.92	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
16-Dec-04	2004	5831	142.3	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
16-Dec-04	2004	49059A	4951	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
16-Dec-04	2004	38446	181.48	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
16-Dec-04	2004	6508	19.48	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
16-Dec-04	2004	6510	44.27	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
16-Dec-04	2004	58101	11665	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
16-Dec-04	2004	5828	112.42	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
16-Dec-04	2004	52481	167.19	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
16-Dec-04	2004	451391	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
16-Dec-04	2004	5245	8.475	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	z (obsolete) BH Commercial (BQC Quarries)
16-Dec-04	2004	6407 BHWSS	32.97	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
16-Dec-04	2004	5822	190.92	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
16-Dec-04	2004	5823	657.76	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH River
16-Dec-04	2004	33510	0	Burdekin River & Burdekin Falls Dam	Burdekin River from Clare B to Elliot Pump Station	Burdekin River 64km - 58km	BH River
16-Dec-04	2004	55002	13.43	Burdekin River & Burdekin Falls Dam	Burdekin River from Clare B to Elliot Pump Station	Burdekin River 64km - 58km	BH River
16-Dec-04	2004	6597	42.228	Burdekin River & Burdekin Falls Dam	Burdekin River from Clare B to Elliot Pump Station	Burdekin River 90km - 64km	BH River
16-Dec-04	2004	489451	101.34	Burdekin River & Burdekin Falls Dam	Burdekin River from Clare B to Elliot Pump Station	Burdekin River 90km - 64km	BH River
16-Dec-04	2004	55086	145.18	Burdekin River & Burdekin Falls Dam	Burdekin River from Elliot Pump Station to Clare Weir	Burdekin River 58km - 50.3km	BH River
16-Dec-04	2004	EL059R2	81.35	Elliot	Elliot	Burdekin River 58km - 50.3km	BH Channel
16-Dec-04	2004	EL059R1	326.11	Elliot	Elliot	Burdekin River 58km - 50.3km	BH Channel
16-Dec-04	2004	EL109R1	3.59	Elliot	Elliot Main Control Valve	Burdekin River 58km - 50.3km	BH Channel
16-Dec-04	2004	60654 BHWSS	213.7	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	39098	21.078	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	34988	18.482	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	34987	25.511	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	34941	92.5	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	34942	98.938	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	39145	33.197	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	52539	214.76	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Commercial (Parison Agreement)
16-Dec-04	2004	34955 BHWSS	0.017	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	54955W	0.001	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	4562	18.8	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Commercial (Parison Agreement)
16-Dec-04	2004	96127	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	35500	66.54	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Commercial (Parison Agreement)
16-Dec-04	2004	39202	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	39730 BHWSS	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	60508	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	34934	173.206	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	34933	65.019	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area

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16-Dec-04	2004	BM032W1	103.02	Haughton	GLADDYS LAGOON OFFTAKE	Burdekin River 64km - 58km	z (obsolete) BH Commercial (Ross)
16-Dec-04	2004	HH071R7	509.25	Haughton	HA CH 12.1KM SIPHON	Burdekin River 64km - 58km	BH Channel
16-Dec-04	2004	HH071R8	295.99	Haughton	HA CH 12.1KM SIPHON	Burdekin River 64km - 58km	BH Channel
16-Dec-04	2004	HH071R11	0	Haughton	HA CH 12.1KM SIPHON	Burdekin River 64km - 58km	BH Channel
16-Dec-04	2004	HH071R10UNMETERED	0	Haughton	HA CH 12.1KM SIPHON	Burdekin River 64km - 58km	BH Channel
16-Dec-04	2004	GL57224	100.7	Haughton	Haughton	Burdekin River 64km - 58km	BH Glady's Lagoon
16-Dec-04	2004	GL58113	22.18	Haughton	Haughton	Burdekin River 64km - 58km	BH Glady's Lagoon
16-Dec-04	2004	GL96044	157.03	Haughton	Haughton	Burdekin River 64km - 58km	BH Glady's Lagoon
16-Dec-04	2004	HH071R13	134.3	Haughton	Haughton	Burdekin River 64km - 58km	BH Channel
16-Dec-04	2004	45197	66.87	Haughton	Haughton	Burdekin River 64km - 58km	z (obsolete) BH Commercial (Soper)
16-Dec-04	2004	39870W	186.23	Haughton	Haughton	Burdekin River 64km - 58km	z (obsolete) BH Commercial (Soper)
16-Dec-04	2004	58116	188.14	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	45145	0	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	45144	164.23	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	39099	104.89	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	55014	113.82	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	39995	72.48	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	39087	102.25	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	39147	31.68	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	39146	82.47	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	57257	261.04	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	48939	60.86	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	96070	32.22	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	39114	77.413	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	39127	34.923	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	4755	64.266	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	39111	33.163	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	13812	17.91	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	42777	18.31	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	4374	139.62	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	HH071R3	379.52	Haughton	HMC REG 1 1728ML	Burdekin River 64km - 58km	BH Channel
16-Dec-04	2004	HH071R6	80.69	Haughton	HMC REG 1 1728ML	Burdekin River 64km - 58km	BH Channel
16-Dec-04	2004	HH071T-TRUCK	21.268	Haughton	HMC REG 2 1728ML	Burdekin River 64km - 58km	BH Channel
16-Dec-04	2004	HH071R12	19.51	Haughton	HMC REG 2 1728ML	Burdekin River 64km - 58km	BH Channel
16-Dec-04	2004	39703	0	Giru Benefited Area	REEDBEDS P/S	Burdekin River 64km - 58km	BH Commercial (Parison Agreement)
16-Dec-04	2004	BM254R1	0	Barratta	REG43 109ML	Burdekin River 64km - 58km	BH Channel
16-Dec-04	2004	41572	1.577	Giru Benefited Area	SECOND LAGOON	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	57339	172.483	Giru Benefited Area	SECOND LAGOON	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	39989	36.8	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	49090	66.99	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	52577	101.38	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
16-Dec-04	2004	39424	145.46	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
17-Dec-04	2004	CA099W1	88.41	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA034W1	33.44	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA165W1	94.61	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA098W1	10.84	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA094W1	49.53	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA093W1	13.05	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA089W2	29.22	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA089W1	98.14	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA192W1	122.03	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA090W2	10.32	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA090W1	29.24	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA035W1	33.38	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA091W2	93.71	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel

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17-Dec-04	2004	CA194W1	61.13	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA092W1	0	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA091W1	66.597	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA097W1	0	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA095W1	62.85	Clare	A1 OFFTAKE 35ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA099W2	71.006	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA093W2	0.001	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA109W1	33.941	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA158W1	20.94	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA035W2	14.777	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA157W1	18.62	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA105W2	14.791	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA106W1	42.885	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA107W2	39.616	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA108W1	93.795	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA107W3	74.828	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA107W1	0	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA105W1	39.828	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA103W1	72.422	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA100W1	86.249	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA101W1	104.703	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA092W2	5.68	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA091W3	0	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA134W1(CA097W3 on Streamline)	105.253	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA095W2	29.532	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA110W3	9.167	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA110W2	13.9	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA110W1	47.265	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA104W1	148.402	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA036W1	69.56	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CB050W1	24.32	Clare	B1 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB195W1	58.183	Clare	B1 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB195W3	66.29	Clare	B1 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB049W2	56.98	Clare	B1 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB049W1	55.66	Clare	B1 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB170W1	65.59	Clare	B1 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB145W2	159.27	Clare	B1 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB052W1	72.67	Clare	B2 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB145W1	2.67	Clare	B2 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB199W1	58.867	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB216W1	33.377	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB068W1	82.118	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB184W1	125.481	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB058W1	77.051	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB212W1	33.407	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB220W3	20.478	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB220W2	40.26	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB220W1	33.152	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB213W1	28.957	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB197W1	93.586	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB066W1	183.153	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB215W1	57.44	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB219W1	276.778	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB214W1	26.344	Clare	B3 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB082W1	85.32	Clare	B4 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel

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17-Dec-04	2004	CB083W1	0	Clare	B5 OFFTAKE	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CB029W1	0	Clare	B5 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB029W3	0	Clare	B5 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB029W2	0	Clare	B5 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB088W2	40.58	Clare	B6 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB088W1	9.19	Clare	B6 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB048W1	104.43	Clare	B6 OFFTAKE	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CB085W1	26.35	Clare	B6 OFFTAKE	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CB085W2	26.06	Clare	B6 OFFTAKE	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CB191W1	0	Clare	B8 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB074W2	0.01	Clare	B8 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB208W1	0	Clare	B8/1 OFFTAKE	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CB190W1	69.51	Clare	B8/1 OFFTAKE	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CB209W1	27.03	Clare	B8/1 OFFTAKE	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA045W1	68.755	Clare	CAMC below A4 offtake	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA118W1	31.426	Clare	CAMC below A4 offtake	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA047W1	0	Clare	CAMC below A4 offtake	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA046W1	0.866	Clare	CAMC below A4 offtake	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA046W2	24.123	Clare	CAMC below A4 offtake	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA043W1	78.024	Clare	CAMC Overflow to A4 offtake	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CA042W1	47.217	Clare	CAMC Overflow to A4 offtake	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CB188W1	64.15	Clare	CHECK 189	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB191W2	0	Clare	CHECK 189	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB188W2	65.44	Clare	CHECK 189	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB178W1	109.36	Clare	CHECK 189	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CB024W2	111.84	Clare	CHECK 24C	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB024W1	107.99	Clare	CHECK 24C	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB061W1	108.22	Clare	CHECK 24C	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CA041W1	61.403	Clare	Check 38 to CAMC Overflow	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA040W1	52.826	Clare	Check 38 to CAMC Overflow	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA039W1	56.555	Clare	Check 38 to CAMC Overflow	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CB050W2	62.66	Clare	CHECK 50	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB050W3	43.65	Clare	CHECK 50	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB051W3	24.76	Clare	CHECK 50	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB051W2	22.82	Clare	CHECK 50	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB051W1	60.97	Clare	CHECK 50	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB076W1	53.56	Clare	CHECK 69	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB166W1	5.99	Clare	CHECK 69	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB167W1	0	Clare	CHECK 69	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB168W1	27.3	Clare	CHECK 69	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB075W1	0	Clare	CHECK 69	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB074W1	0	Clare	CHECK 69	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB169W1	0	Clare	CHECK 69	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB072W1	23.17	Clare	CHECK 69	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB077W1	0	Clare	CHECK 76	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB080W1	57.95	Clare	CHECK 76	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB079W1	101.36	Clare	CHECK 76	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB078W1	90.74	Clare	CHECK 76	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB081W1	36.25	Clare	CHECK 80	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB081W2	34.68	Clare	CHECK 80	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB080W2	36.99	Clare	CHECK 80	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB053W1	16	Clare	CHECK52	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB052W2	16.15	Clare	CHECK52	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB055W1	198.755	Clare	CHECK53	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB056W1	3.52	Clare	CHECK53	Burdekin River 58km - 50.3km	BH Channel

Effective Date	Year	Offtake Number	Volume	Operational System	Operational Section	ROL Zone	Billing Group
17-Dec-04	2004	CB054W1	53.73	Clare	CHECK53	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB053W2	20.54	Clare	CHECK53	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB057W1	25.87	Clare	CHECK53	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB063W1	58.05	Clare	CHECK61	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB071W1	41.98	Clare	CHECK61	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB023W1	13.67	Clare	CHECK61	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB023W2	22.16	Clare	CHECK61	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB065W1	22.31	Clare	CHECK61	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB069W1	43.94	Clare	CHECK61	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB068W2	67.173	Clare	Clare	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB084W1	101.42	Clare	Clare	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CB187W1(CB176W1)	428.109	Clare	Clare	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CL117R1	3.834	Clare	Clare	Burdekin River 58km - 50.3km	BH Commercial (Rural Stock & Domestic)
17-Dec-04	2004	CA160W1	6.81	Clare	CLARE A MAIN CH from CLARE WTP to Check 38	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA159W1	9.74	Clare	CLARE A MAIN CH from CLARE WTP to Check 38	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CA038W1	41.11	Clare	CLARE A MAIN CH from CLARE WTP to Check 38	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CB171W3	24.03	Clare	CLARE B MAIN CH	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB171W2	38.35	Clare	CLARE B MAIN CH	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB171W1	58.52	Clare	CLARE B MAIN CH	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	34939	10.5	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
17-Dec-04	2004	39211	26.421	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
17-Dec-04	2004	60228 BHWSS	111.759	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
17-Dec-04	2004	34936	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
17-Dec-04	2004	34935	111.664	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
17-Dec-04	2004	39148	86.3	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
17-Dec-04	2004	35619	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
17-Dec-04	2004	35618	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
17-Dec-04	2004	35617	20.127	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
17-Dec-04	2004	39197 BHWSS	69.001	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
17-Dec-04	2004	CB142W2	8.38	Clare	OVERFLOW	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB142W1	93.13	Clare	OVERFLOW	Burdekin River 58km - 50.3km	BH Channel
17-Dec-04	2004	CB222W1	72.46	Clare	OVERFLOW	D/S of Clare Weir	BH Channel
17-Dec-04	2004	CB222W2	87.7	Clare	OVERFLOW	D/S of Clare Weir	BH Channel
18-Dec-04	2004	HH016R1	256.11	Haughton	H13 Reg 97	Burdekin River 64km - 58km	BH Channel
18-Dec-04	2004	HS080R1	0	Haughton	H15	Burdekin River 64km - 58km	BH Channel
18-Dec-04	2004	HS080R1	190	Haughton	H15	Burdekin River 64km - 58km	BH Channel
18-Dec-04	2004	HS063R1	104.99	Haughton	Haughton	Burdekin River 64km - 58km	BH Channel
18-Dec-04	2004	HH029R1	610.74	Haughton	HMC REG 9 518ML	Burdekin River 64km - 58km	BH Channel
19-Dec-04	2004	96702	3.305	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	CA109W2	0	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
20-Dec-04	2004	CA102W1	0	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
20-Dec-04	2004	CA112W1	233.07	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
20-Dec-04	2004	CA117W1	62.543	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
20-Dec-04	2004	CA116W1	38.658	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
20-Dec-04	2004	CA044W1	18.33	Clare	A4 offtake to A4/2	D/S of Clare Weir	BH Channel
20-Dec-04	2004	CA044W2	22.69	Clare	A4/2 to A4/2/1 offtake	D/S of Clare Weir	BH Channel
20-Dec-04	2004	34966	22.557	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	35255	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	34993	98.282	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	35509	36.23	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	39116	10.34	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	39117	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	35019	6.115	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	35021	35.416	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	54157	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area

Effective Date	Year	Offtake Number	Volume	Operational System	Operational Section	ROL Zone	Billing Group
20-Dec-04	2004	39822	58.497	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	39722	15.463	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	57274	323.04	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	35558	111.328	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	35555	20.499	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	39821	82.542	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	76236	33.71	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	39122	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	58127UNMETERED	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	54700UNMETERED	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	35508	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	35510	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	39141	128.54	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	39731	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	6902	52.17	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	42723	52.74	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	37873	177.72	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	37872	40.81	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	37871	95.48	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	35506	92.13	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	19699	51.91	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	55069	36.353	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	17364	257.23	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	42729	8.834	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	54956	0	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	54979W	4.721	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	39113	149.74	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	4653	61.69	Giru Benefited Area	HEALEYS OFFTAKE	Burdekin River 64km - 58km	BH Giru Groundwater Area
20-Dec-04	2004	Por 51V ROKEBY	1.963	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
20-Dec-04	2004	Lot 2 RP743439 ROKEBY	0.009	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
20-Dec-04	2004	LOT 4 & 7 SP105681 WOODSTOCK	0.675	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
20-Dec-04	2004	LOT 2 EP782 WOODSTOCK	0.038	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
20-Dec-04	2004	LOT 2 SP146640 WOODSTOCK	15.431	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
20-Dec-04	2004	Lot 3 RP808101	5.252	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
20-Dec-04	2004	Lot 1,2 RP735155 ROKEBY	1.037	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
20-Dec-04	2004	Lot 1 RP735157 ROKEBY	0	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
20-Dec-04	2004	Por 35V ROKEBY	0	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
20-Dec-04	2004	L 7,11,12 RP708664 MAGENTA	0	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
20-Dec-04	2004	LOT 1 RP712300 WOODSTOCK	3.22	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
20-Dec-04	2004	Lot 1 RP744370 WOODSTOCK	0.286	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (Townsville Thuringowa Offtakes)
21-Dec-04	2004	CA113W1	99.315	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA164W1	14.069	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA163W1	26.91	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA114W1	50.696	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA207W1	40.888	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA162W1	15.168	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA114W2	88.908	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA161W1	20.384	Clare	A4 below A4/2	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA127W1	35.362	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA203W1	3.117	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA125W1	38.233	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA228W1	124.81	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA136W1	89.799	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA204W1	95.929	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA202W1	0	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel

Effective Date	Year	Offtake Number	Volume	Operational System	Operational Section	ROL Zone	Billing Group
21-Dec-04	2004	CA206W1	40.172	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA205W1	30.08	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA126W1	16.335	Clare	A4/2 below A4/2/1	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA119W1	48.884	Clare	A4/2 to A4/2/1 offtake	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA121W1	171.546	Clare	A4/2 to A4/2/1 offtake	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA120W1	69.174	Clare	A4/2 to A4/2/1 offtake	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA227W1	0	Clare	A4/2/1	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA226W1	28.62	Clare	A4/2/1	D/S of Clare Weir	BH Channel
21-Dec-04	2004	CA225W1	138.73	Clare	A4/2/1	D/S of Clare Weir	BH Channel
21-Dec-04	2004	BMP34W1	85.31	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP44W1	113.7	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP42W1	126.65	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP43W1	0	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP40W1	77.81	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP30W1	50.65	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP31W1	95.94	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP31W2	4.96	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP32W1	127.29	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP33W1	98.01	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP41W1	77.02	Barratta	BA6 PIPELINE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	76173	183.679	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
21-Dec-04	2004	39044	110.07	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
21-Dec-04	2004	76002	78.905	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
21-Dec-04	2004	HH046R1	353.28	Haughton	H10 OFFTAKE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH044W1	276.8	Haughton	H10/1	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH047R1	312.55	Haughton	H10/1	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH024R1	476.61	Haughton	H12 Reg 98	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH022R2	137.35	Haughton	H12 Reg 98	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH017W1	295.22	Haughton	H13 Reg 97	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH015R1	460.03	Haughton	H13 Reg 97	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH015W1	1.14	Haughton	H13 Reg 97	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH016R1	2.94	Haughton	H13 Reg 97	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS081R1	270.26	Haughton	H15	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS079W1	0	Haughton	H15 OFFTAKE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS088R1	448.14	Haughton	H15 REG 94	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS089R2	41.58	Haughton	H15 REG 94	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS089R1	67.57	Haughton	H15 REG 94	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS083R1	177.63	Haughton	H15/1	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS090W1	414.07	Haughton	H15/2	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS087R1	358.25	Haughton	H15/2	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS091R1	129.63	Haughton	H15/2	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS060R1	41.515	Haughton	H16 REG 82 55ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS061R1	238.61	Haughton	H16 REG 82 55ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS059R1	0	Haughton	H16 REG 82 55ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS058W1	124.84	Haughton	H16 REG 82 55ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS057W1	130.93	Haughton	H16 REG 82 55ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS056W1	4.96	Haughton	H16 REG 83 43ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS055W1	174.84	Haughton	H16 REG 83 43ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS030D2	101.32	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS030D1	19.13	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS001D1	139.07	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS007D1	153.54	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS055D1	271.19	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS005D1	92.395	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS008D2	165	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel

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21-Dec-04	2004	HS008D1	123.79	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS002D1	137.43	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS004D1	64.75	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS003D1	89.49	Haughton	H16 REG 84 39ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS085R1	131.63	Haughton	H17 OFFTAKE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS084R1	171.54	Haughton	H17 OFFTAKE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS086W1	166.16	Haughton	H17 OFFTAKE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS039R1	35.781	Haughton	H17 OFFTAKE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS038R1	24.746	Haughton	H17 OFFTAKE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS071W1	151.19	Haughton	H18 REG 85 14ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS171W1	259.47	Haughton	H18 REG 85 14ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS001R1	112.84	Haughton	H19 REG 86 51ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS004R1	80.641	Haughton	H19 REG 86 51ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS002R1	235.88	Haughton	H19 REG 86 51ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS020R1	85.11	Haughton	H19 REG 86 51ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS013R1	396.75	Haughton	H19 REG 86 51ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS071R1	123.81	Haughton	H20 REG 87 86ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS006R1	197.08	Haughton	H20 REG 87 86ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS005R2	121.15	Haughton	H20 REG 87 86ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS005R3	201.07	Haughton	H20 REG 87 86ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS067R1	273.68	Haughton	H20 REG 87 86ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS069R1	19.96	Haughton	H20 REG 87 86ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS065R1	396.12	Haughton	H20/1 REG 88 47ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS066R1	231.08	Haughton	H20/1 REG 88 47ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS168R1	204.87	Haughton	H20/1 REG 88 47ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS167R1	214.63	Haughton	H20/1 REG 88 47ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS069R2	112.36	Haughton	H20/1 REG 88 47ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH071R1	227.77	Haughton	H6	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH070R1	234.87	Haughton	H6	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH073R1	332.09	Haughton	H6	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH072R1	212.4	Haughton	H6	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH068R1	181.72	Haughton	H6 Reg 110	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH069R1	268.46	Haughton	H6 Reg 110	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH076R1	22.17	Haughton	H6/1 Reg 112	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH075R1	30.92	Haughton	H6/1 Reg 112	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH074R1	0	Haughton	H6/1 Reg 112	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH060R1	297.08	Haughton	H7 Reg 113	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH061R1	92.98	Haughton	H7 Reg 113	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH065R1	226.58	Haughton	H7 Reg 114	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH066R1	638.81	Haughton	H7 Reg 114	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH064R1	148.32	Haughton	H7 Reg 114	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH063R1	0	Haughton	H7 Reg 114	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH042R1	18.69	Haughton	H8 CHANNEL	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH041R1	49.849	Haughton	H8 CHANNEL	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS001R2OBSOLETE	0	Haughton	Haughton	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS063R1	1.62	Haughton	Haughton	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS082R1	0	Haughton	Haughton	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH062R1	116.47	Haughton	Haughton	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL002AR1	12.162	Haughton	Haughton	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS020W1	174.62	Haughton	HMC	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH030R1	64.655	Haughton	HMC REG 10 518ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH031R1	372.71	Haughton	HMC REG 10 518ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS076W1	463.83	Haughton	HMC REG 11 518ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS064R1	123.63	Haughton	HMC REG 11 518ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS062R1	156.54	Haughton	HMC REG 12 518ML	Burdekin River 64km - 58km	BH Channel

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21-Dec-04	2004	HS078R1	280.41	Haughton	HMC REG 12 518ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS077R1	506.83	Haughton	HMC REG 12 518ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS079R1	214.25	Haughton	HMC REG 12 518ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS040R1	109.81	Haughton	HMC REG 14 345ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS172R2	148.45	Haughton	HMC REG 14 345ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS172R1	221.53	Haughton	HMC REG 14 345ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS021R2	165.97	Haughton	HMC REG 14 345ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS021R1	136.42	Haughton	HMC REG 14 345ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS020R2	240.77	Haughton	HMC REG 15 259ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS005R1	381.79	Haughton	HMC REG 15 259ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH028R1	237.49	Haughton	HMC REG 8 604ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH025W1	266.27	Haughton	HMC REG 8 604ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HLCR1	6.11	Haughton	HMC REG 89 138ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HLBR1	302.69	Haughton	HMC REG 89 138ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL095R1	698.5	Haughton	HMC REG 89 138ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HLDR1	0	Haughton	HMC REG 89 138ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HLAR2	1.455	Haughton	HMC REG 89 138ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HLAR1	32.51	Haughton	HMC REG 89 138ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HH029R1	2.88	Haughton	HMC REG 9 518ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HLER1	71.62	Haughton	HMC REG 95 103ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL059R1	157.49	Haughton	HMC REG 95 103ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL060R1	415.12	Haughton	HMC REG 95 103ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HLGR1	130.08	Haughton	HMC REG 95 103ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL094R1	478.14	Haughton	HMC REG 95 103ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL058R2	0	Haughton	HMC REG 95 103ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL058R1	139.37	Haughton	HMC REG 95 103ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL067R1	34.927	Haughton	HMC REG 96 76ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL054R1	136.81	Haughton	HMC REG 96 76ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL099R1	44.974	Haughton	HMC REG 96 76ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL056R1	116.18	Haughton	HMC REG 96 76ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL100R1	8.611	Haughton	HMC REG 96 76ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL055R1	39.654	Haughton	HMC REG 96 76ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL096R1	115.824	Haughton	HMC REG 96 76ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL057R1	119.21	Haughton	HMC REG 96 76ML	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS21FR1	19.47	Haughton	HS21 PIPELINE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS21ER1	71.84	Haughton	HS21 PIPELINE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS21DR1	67.7	Haughton	HS21 PIPELINE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS21CR1	31.97	Haughton	HS21 PIPELINE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS21AR1	78.53	Haughton	HS21 PIPELINE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS21BR1	52.55	Haughton	HS21 PIPELINE	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP60W1	21.12	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP61W1	20.81	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP62W1	85.92	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP50W1	0	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP51W1	193.12	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP53W1	0	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP54W1	130.78	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP63W1	0.01	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP64W1	161.93	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP65W1	75.13	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BMP52W1	25.99	Barratta	ISOLATING TOWER	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS033D1	0	Haughton	REG RH5	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS003R1	12.644	Haughton	REG RH5	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS079R2	192.61	Haughton	REG RH5	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS032D1	166.08	Haughton	REG RH5	Burdekin River 64km - 58km	BH Channel

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21-Dec-04	2004	HS02AD1	129.31	Haughton	REG RH5	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HS031D1	111.48	Haughton	REG RH5	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BJ062W1	45.85	Barratta	Regulator 79	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BJ062W4	0	Barratta	Regulator 79	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BJ062W2	43.85	Barratta	Regulator 79	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	BJ062W3	122.9	Barratta	Regulator 79	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL102R1	9.22	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL103R1	15.448	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL073R1	47.84	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL105R1	3.841	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL068R1	78.755	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL071R1	97.56	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL070R1	0	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL072R1	84.683	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL101R1	8.977	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL104R1	2.047	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL107R1	32.97	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	HL069R1	0	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
21-Dec-04	2004	39054	139.55	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
21-Dec-04	2004	39054A	93.08	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
21-Dec-04	2004	57256	1020.81	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	CUNGULLA TOWN WATER	89.622	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	Burdekin River 64km - 58km	BH Commercial (Citiwater)
22-Dec-04	2004	60167	25.949	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	76755	336.07	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	60620	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	85935	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	57260p2	552.81	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	39078	94.343	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	39778	0.18	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	39777	9.17	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	5357 BHWSS	36.477	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	33943	1.711	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	96190	38.531	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	96189	457.275	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	96188	74.783	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	96187	93.495	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	96185	51.33	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	39140	183.82	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	39175	99.393	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	39173	748.98	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	60383	23.34	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	34964	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	34962	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	34961 OBSOLETE	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	34958	230.87	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	39062	156.65	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	39050	183.622	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	39049	5.78	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	60509	142.102	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	52420	15.43	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Commercial (CSR Limited - sugar)
22-Dec-04	2004	96051	3.8	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Commercial (CSR Limited - sugar)
22-Dec-04	2004	58126	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Commercial (CSR Limited - sugar)
22-Dec-04	2004	39051	95.119	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	57346	1223.24	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	HH048W1	322.55	Haughton	H10	Burdekin River 64km - 58km	BH Channel

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22-Dec-04	2004	HH052W1	94.51	Haughton	H10	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH010W1	97.08	Haughton	H10	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH020R1	464.87	Haughton	H10	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH054W1	0.04	Haughton	H10	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH054W1	390	Haughton	H10	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH011W1	122.72	Haughton	H10	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH050W1	151.13	Haughton	H10 Reg 100	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH012R2	119.9	Haughton	H10 Reg 100	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH012R1	927.88	Haughton	H10 Reg 100	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH013R1	193.82	Haughton	H10 Reg 100	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH057R1	0	Haughton	H10 Reg 100	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH048R1	138.72	Haughton	H10 Reg 99	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH049W1	506.28	Haughton	H10 Reg 99	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH019R1	178.13	Haughton	H10 Reg 99	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH055W1	126.06	Haughton	H10/2	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH056W1	197.47	Haughton	H10/2	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH053W1	160.56	Haughton	H10/3	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH051R1	175.04	Haughton	H10/3	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH051W1	138.81	Haughton	H10/3	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH022R1	138.59	Haughton	H12 Reg 98	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH016R1	0	Haughton	H13 Reg 97	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH052W2	34.367	Haughton	Haughton	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HS063R1	0	Haughton	Haughton	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	57260	0	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	39154	167.81	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	39156	160.7	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	39160	0	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	39161	66.626	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	39162	104.106	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	54987	186.27	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	34960	0.001	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	48979	447.98	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	39155	128.788	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	57330	0	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	HH026R1	114.21	Haughton	HMC	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH021R1	434.25	Haughton	HMC	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH027R1	133.23	Haughton	HMC REG 8 604ML	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	HH029R1	0	Haughton	HMC REG 9 518ML	Burdekin River 64km - 58km	BH Channel
22-Dec-04	2004	57279	209.59	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	96096/1	110.81	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	39080	375.11	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	49083	118.33	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	58122	174.5	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	52422	34.23	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	49033	110.25	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	48955	57.67	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	38403	43.373	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
22-Dec-04	2004	49007	179.897	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
23-Dec-04	2004	105099	0	Giru Benefited Area	Giru Benefited Area	Burdekin River 64km - 58km	BH Giru Groundwater Area
23-Dec-04	2004	49021	85.84	Giru Benefited Area	Haughton River	Burdekin River 64km - 58km	BH Giru Groundwater Area
23-Dec-04	2004	39676	0	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
23-Dec-04	2004	52423	0	Giru Benefited Area	VAL BIRD WEIR	Burdekin River 64km - 58km	BH Giru Groundwater Area
25-Dec-04	2004	HL074R1	11.974	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
30-Dec-04	2004	CB050W1	5.51	Clare	B1 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
30-Dec-04	2004	CB050W3	11.44	Clare	CHECK 50	Burdekin River 58km - 50.3km	BH Channel

Effective Date	Year	Offtake Number	Volume	Operational System	Operational Section	ROL Zone	Billing Group
30-Dec-04	2004	CB171W3	5.52	Clare	CLARE B MAIN CH	Burdekin River 58km - 50.3km	BH Channel
30-Dec-04	2004	CB171W2	7.31	Clare	CLARE B MAIN CH	Burdekin River 58km - 50.3km	BH Channel
31-Dec-04	2004	CA093W2	17	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
31-Dec-04	2004	CA102W1	64	Clare	A2 OFFTAKE 45ML	D/S of Clare Weir	BH Channel
31-Dec-04	2004	CA227W1	90	Clare	A4/2/1	D/S of Clare Weir	BH Channel
31-Dec-04	2004	CB145W1	50	Clare	B2 OFFTAKE	Burdekin River 58km - 50.3km	BH Channel
31-Dec-04	2004	BN051W2	100	Barratta	BA5/2 MANUALLY OPER 9ML	Burdekin River 64km - 58km	BH Channel
31-Dec-04	2004	RIPARIAN - SOUTH	0	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Dec-04	2004	MCDOWELLS PUMP 2	2134	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Dec-04	2004	MCDOWELLS PUMP 3	2163	Burdekin River & Burdekin Falls Dam	Burdekin River & Burdekin Falls Dam	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Dec-04	2004	ROCKS	6456	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Dec-04	2004	PC NO. 2	12102	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Dec-04	2004	RITA ISLAND	1315	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Dec-04	2004	RONCATO	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Dec-04	2004	Riparian	0	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (NBWB Alloc + Usage)
31-Dec-04	2004	Warrens Gully	4904	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Dec-04	2004	MCDOWELLS PUMP 1	1914	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Dec-04	2004	D/River	1230	Burdekin River & Burdekin Falls Dam	Burdekin River below Clare Weir	D/S of Clare Weir	BH Commercial (SBWB Alloc + Usage)
31-Dec-04	2004	55076	8.55	Burdekin River & Burdekin Falls Dam	Burdekin River from Clare B to Elliot Pump Station	Burdekin River 90km - 64km	BH River
31-Dec-04	2004	CA046W1	12	Clare	CAMC below A4 offtake	D/S of Clare Weir	BH Channel
31-Dec-04	2004	CB050W2	12.27	Clare	CHECK 50	Burdekin River 58km - 50.3km	BH Channel
31-Dec-04	2004	CB077W1	0	Clare	CHECK 76	Burdekin River 58km - 50.3km	BH Channel
31-Dec-04	2004	CB077W1	75	Clare	CHECK 76	Burdekin River 58km - 50.3km	BH Channel
31-Dec-04	2004	C11/10	0.091	Clare	Clare	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C15/7	0.111	Clare	Clare	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	CB171W1	14.68	Clare	CLARE B MAIN CH	Burdekin River 58km - 50.3km	BH Channel
31-Dec-04	2004	DALBEG HALL	0.492	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Commercial (Town Water)
31-Dec-04	2004	D22/11B	0.463	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Commercial (Town Water)
31-Dec-04	2004	D22/11	0.08	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Commercial (Town Water)
31-Dec-04	2004	S10	0.03	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Commercial (Town Water)
31-Dec-04	2004	DTW Lot1 CP D9154(rca)	0.047	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Commercial (Town Water)
31-Dec-04	2004	DTW Lot 29 GS 949(wrca)	0.48	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Commercial (Town Water)
31-Dec-04	2004	DTW Lot18 D9156	0	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Commercial (Town Water)
31-Dec-04	2004	D24/11	0.136	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Commercial (Town Water)
31-Dec-04	2004	SHED	0.028	Dalbeg	Dalbeg	Burdekin Falls Dam & Burdekin River	BH Commercial (Town Water)
31-Dec-04	2004	HH016R1	54.95	Haughton	H13 Reg 97	Burdekin River 64km - 58km	BH Channel
31-Dec-04	2004	HS069R1	100	Haughton	H20 REG 87 86ML	Burdekin River 64km - 58km	BH Channel
31-Dec-04	2004	HH074R1	398	Haughton	H6/1 Reg 112	Burdekin River 64km - 58km	BH Channel
31-Dec-04	2004	HS063R1	20.89	Haughton	Haughton	Burdekin River 64km - 58km	BH Channel
31-Dec-04	2004	HH029R1	132.11	Haughton	HMC REG 9 518ML	Burdekin River 64km - 58km	BH Channel
31-Dec-04	2004	C2/10	0.061	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	CLARE HALL	0.195	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C6/10	0.242	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water Staff)
31-Dec-04	2004	C1/10	0.191	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water Staff)
31-Dec-04	2004	STORE	0.005	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C9/9	0.448	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C5/10	0.112	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water Staff)
31-Dec-04	2004	C3/10	0.031	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C4/10	0	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water Staff)
31-Dec-04	2004	C4-5/9	0.187	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C11/9	0.244	Clare	Line 1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	P25	0	Clare	Line 1/1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	RES1	0.084	Clare	Line 1/1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	RES2	0.058	Clare	Line 1/1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	10523/1	0.343	Clare	Line 1/1	D/S of Clare Weir	BH Commercial (Town Water)

Effective Date	Year	Offtake Number	Volume	Operational System	Operational Section	ROL Zone	Billing Group
31-Dec-04	2004	POL/RES	0.074	Clare	Line 1/1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	CTW POLICE	0.031	Clare	Line 1/1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C10/13	0.071	Clare	Line 1/1	D/S of Clare Weir	BH Commercial (Town Water Staff)
31-Dec-04	2004	CLARE POOL	1.221	Clare	Line 2	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C7/7	0.234	Clare	Line 2	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C8/7	0.287	Clare	Line 2	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C6/7	0	Clare	Line 2	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C14/6	0.048	Clare	Line 2	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	P110	0.015	Clare	Line 2	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C13/6	0	Clare	Line 2	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C9/7	0	Clare	Line 2	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C4/7	0.261	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C5/7	0.128	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C10/7	0	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C3/7	0	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C7/6	0	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C14/7	0.319	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C16/7	0.388	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C2/7	0.376	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C11/6	0.01	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C11/6A	0.127	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C13/7	0	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water Staff)
31-Dec-04	2004	C11/7	0.006	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water Staff)
31-Dec-04	2004	C10/6	0.044	Clare	Line 2/1	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C10/10	0.248	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C12/10	0.067	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water Staff)
31-Dec-04	2004	CTW RECRES1	0.623	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	CTW RECRES	0	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	CLARE RESIDENCE	0.136	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	CTW CLARE SMQ	0.158	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	SCH	0.298	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	SCH01	0.699	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	SCH02	0.311	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	CTW SCHAB	0.415	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C9/10	0.242	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water Staff)
31-Dec-04	2004	C8/10	0.149	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	C7/10	0.167	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water Staff)
31-Dec-04	2004	C1/14	0.07	Clare	Line 2/3	D/S of Clare Weir	BH Commercial (Town Water)
31-Dec-04	2004	DEPOT	0.164	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
31-Dec-04	2004	M9/10	0	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
31-Dec-04	2004	DPI4	0.046	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
31-Dec-04	2004	MILLAROO HALL	0.111	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
31-Dec-04	2004	MILLAROO POOL	0.829	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
31-Dec-04	2004	M15/15	0.225	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
31-Dec-04	2004	Lot1 PER5994	0.006	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
31-Dec-04	2004	MILLAROO RESIDENCE	0.076	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
31-Dec-04	2004	SCHOOL	1.824	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
31-Dec-04	2004	M19/10	0.202	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
31-Dec-04	2004	DPI1	0.123	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
31-Dec-04	2004	MTW L2 M9104	0.142	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
31-Dec-04	2004	CHURCH	0	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
31-Dec-04	2004	DPI3	0.148	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
31-Dec-04	2004	M5/10	0.046	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water Staff)
31-Dec-04	2004	S11	0.208	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
31-Dec-04	2004	M3/14	0.123	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water Staff)

Effective Date	Year	Offtake Number	Volume	Operational System	Operational Section	ROL Zone	Billing Group
31-Dec-04	2004	M3/14A	0.631	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water Staff)
31-Dec-04	2004	M8/10	0	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water)
31-Dec-04	2004	M13/15	0.001	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water Staff)
31-Dec-04	2004	M13/15A	0.226	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water Staff)
31-Dec-04	2004	M4/17	0.085	Millaroo	Millaroo	Burdekin River 90km - 64km	BH Commercial (Town Water Staff)
31-Dec-04	2004	BM268W1	250	Barratta	REG48 56ML	Burdekin River 64km - 58km	BH Channel
31-Dec-04	2004	BM267W1	280	Barratta	REG48 56ML	Burdekin River 64km - 58km	BH Channel
31-Dec-04	2004	BN039W1	390	Barratta	REG65 103ML	Burdekin River 64km - 58km	BH Channel
31-Dec-04	2004	BN039W1	0	Barratta	REG65 103ML	Burdekin River 64km - 58km	BH Channel
31-Dec-04	2004	EL041W1	72	Elliot	Regulator 52	Burdekin River 58km - 50.3km	BH Channel
31-Dec-04	2004	BJ062W4	95	Barratta	Regulator 79	Burdekin River 64km - 58km	BH Channel
31-Dec-04	2004	100870	0	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (NQ Water)
31-Dec-04	2004	100870	73.872	Townsville Thuringowa Pipeline	Townsville & Thuringowa Pump Station	Burdekin River 64km - 58km	BH Commercial (NQ Water)
31-Dec-04	2004	HL069R1	40	Haughton	Trembath road pipeline	Burdekin River 64km - 58km	BH Channel
31-Dec-04	2004		-27.911	Townsville Thuringowa Pipeline			
31-Dec-04	2004		150	Townsville Thuringowa Pipeline			
31-Dec-04	2004		-150	Townsville Thuringowa Pipeline			

APPENDIX D

MAP OF METERING LOCATIONS

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510000 515000 520000 525000 530000
7835000 7830000 7825000 7820000 7815000 7810000 7805000 7800000

CHANNEL H20
CHANNEL H19
CHANNEL H18
CHANNEL H17
CHANNEL H16
CHANNEL H15/1
CHANNEL H15
CHANNEL H10/2
CHANNEL H10/1
CHANNEL H10
CHANNEL H8
CHANNEL H7
CHANNEL H6
CHANNEL H6/1
DRAIN RH5
DRAIN LB3/4
DRAIN LB3/14
DRAIN LB3
DRAIN LB5
DRAIN LB3/14/1
DRAIN LB8
DRAIN LB9/1
DRAIN LB10
DRAIN LB11
DRAIN LB12
DRAIN LB13
DRAIN LB14
DRAIN LB15 LEVEE
DRAIN LB15
LOT 55 & 56 LEVEE
LOT 55 LEVEE
LOT 44 LEVEE
LOT 60 LEVEE
AIRSTRIP
BARRATTA CREEK
DRAIN RB2/0
DRAIN RB1/0
DRAIN RB2/1
DRAIN RB1/1
DRAIN RB1
DRAIN RB2/2
DRAIN RB1/2/1A
DRAIN RB2
DRAIN RB1/2A
DRAIN RB1/3
DRAIN RB1/4
DRAIN RB1/2
CHANNEL Ba8
CHANNEL Ba9
DRAIN RB4/1
DRAIN RB3/1
DRAIN RB3/1/2
DRAIN RB3/1/3
DRAIN RB3/1/1
DRAIN RB3
CHANNEL Ba5
CHANNEL Ba5/1
CHANNEL Ba6
CHANNEL Ba6/1
BARRATTA MAIN CHANNEL
DRAIN 1A
CHANNEL A4/2
DRAIN 1/1
DRAIN 1/1/5
DRAIN 1/7
CHANNEL A4
DRAIN 1/2/3
DRAIN 1
CHANNEL A2
DRAIN 1/2
CHANNEL A1
MAIN CHANNEL A
DRAIN 2
DRAIN 2/1
DRAIN 2/3
DRAIN 2/2
CHANNEL B6
CHANNEL B5
CHANNEL B8/1
CHANNEL B8
MAIN CHANNEL B
DRAIN RB5/2
DRAIN RB5/3
DRAIN RB5/4
DRAIN RB5
DRAIN 3
DRAIN 3/1
DRAIN 3/2
CHANNEL B2
DRAIN 4
CHANNEL B1
DRAIN 5
DRAIN RB7
DRAIN RB8
DRAIN RB6
DRAIN RB9
CHANNEL Ba1/1
CHANNEL Ba1/2
CHANNEL Ba1
DRAIN LO1
DRAIN LO1A
DRAIN LO2
CHANNEL E1/1
CHANNEL E1
CHANNEL E2
DRAIN LC2
DRAIN LC1/1
DRAIN LC1/2
DRAIN LC1/3
DRAIN LC1/4
DRAIN LC1
ELLIOT MAIN CHANNEL
HAUGHTON MAIN CHANNEL

N W E S

LEGEND

Metering_Locations

Type

- Inline
- Offtake
- Overflow

SunWater Infrastructure

- Earth and Lined Channels
- Pipeline Channels
- Earth Drains
- Embankments

BURDEKIN HAUGHTON WATER SUPPLY SCHEME

BARRATTA AND HAUGTON SECTION CRITICAL LOCATIONS FOR METERING

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0 500 1,000 2,000 3,000 4,000 5,000 m

APPENDIX E

MAPS OF BHWSS SECTIONS

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' Copyright. SunWater 2008.

147 6'0"E | 147 8'0"E | 515000 | 147 10'0"E | 520000 | 147 12'0"E

19 30'0"S | 19 32'0"S | 19 34'0"S | 19 36'0"S | 19 38'0"S | 19 40'0"S

7840000 | 7835000 | 7830000 | 7825000

GIRU
HORSESHOE LAGOON
HAUGHTON RIVER
HAUGHTON MAIN CHANNEL
SHIRBOURNE ROAD
TREMBATH ROAD
TRUDY ROAD
COMISKEY ROAD
ROAD
BRUCE HIGHWAY
PLANTATION AVENUE
MANGO AVENUE
KENSINGTON AVENUE
BARTLETT ROAD
HAUGHTON UP-RIVER ROAD
DRAIN RH5
DRAIN RH5/1
DRAIN RH5/0
HORSESHOE ROAD
CHANNEL H21
CHANNEL H19
CHANNEL H20
CHANNEL H20/1
CHANNEL H18
CHANNEL H16
CHANNEL H15/2
CHANNEL H15/1
CHANNEL H15
CHANNEL H13
CHANNEL H10
CHANNEL H10/3
DRAIN LB3/8
DRAIN LB3/9
DRAIN LB3/10
DRAIN LB3/11
DRAIN LB3/12
DRAIN LB3/13
DRAIN LB3/14
DRAIN LB3/15
DRAIN LB3/15/1
DRAIN LB3/17
DRAIN LB3/17/1
DRAIN LB3/18
DRAIN LB3/19
DRAIN LB3/19/1
DRAIN LB3/19/2
DRAIN LB3/20
DRAIN LB3
DRAIN LB5
DRAIN LB3/2/1
DRAIN LB3/2/2
DRAIN LB3/2
DRAIN LB3/3
DRAIN LB3/4
DRAIN LB3/7
DRAIN LB3/6
DRAIN LB4
DRAIN RB2/A
DRAIN RB2/2
CALLAGHAN RD
OVERFLOW DRAIN
ROSS ROAD
BREWSTER ROAD
ALLEN ROAD
BARRATTA CREEK
WEST BARRATTA CREEK
AIRSTRIP
YOUNG ROAD
MALONE ROAD
STOCK ROUTE
NORRIS ROAD
WHELAN ROAD
BAHRS ROAD
BAUDINO ROAD
MCLAIN ROAD
HUSTON ROAD

N
W E
S

LEGEND

- Roads
- CSR Cane Railways

SunWater Infrastructure

- Earth and Lined Channels
- Pipeline Channels
- Earth Drains
- Embankments

BURDEKIN HAUGHTON WATER SUPPLY SCHEME

SELKIRK SECTION LAYOUT

0 250 500 1,000 1,500 2,000 2,500 m

1:50,000m

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147 4'0"E | 510000 | 147 6'0"E | 147 8'0"E | 515000 | 147 10'0"E

19 40'0"S | 19 42'0"S | 19 44'0"S | 19 46'0"S | 19 48'0"S

7825000 | 7820000 | 7815000 | 7810000

ROAD | MAJOR CREEK | HAUGHTON UP RIVER | MALONE ROAD | NORRIS ROAD | WHELAN ROAD | BAUDINO ROAD | CADIO ROAD | HUSTON RD | PRICE ROAD | LEON ROAD | HAUGHTON RIVER | BLACK ROAD | HOLLINGSWORTH ROAD | MORRILL ROAD | CIRCUIT ROAD | HAUGHTON DIVERSION CHANNEL | HAUGHTON BALANCING STORAGE | KEITH VENABLES ROAD | OAKY CREEK | BARRATTA ROAD | BROWN ROAD | MUIR ROAD | PEMBLE ROAD | STOCKHAM ROAD | MILLET ROAD | MCMULLEN ROAD | BARRATTA CREEK

DRAIN LB3/15/1 | DRAIN LB3/15 | DRAIN LB3/13 | DRAIN LB3/17 | DRAIN LB3/18 | DRAIN LB3/20 | DRAIN LB3/19 | DRAIN LB3/19/1 | DRAIN LB3 | DRAIN LB3/19/2 | DRAIN LB3/14 | DRAIN LB3/14/1 | DRAIN LB5 | DRAIN LB7 | DRAIN LB8/2 | DRAIN LB8 | DRAIN LB9/1 | DRAIN LB12/1 | DRAIN LB12 | DRAIN LB11 | DRAIN LB14 | DRAIN LB13 | DRAIN LB15 | DRAIN LB15 LEVEE | DRAIN RB6 | DRAIN 2

CHANNEL H15 | CHANNEL H13 | CHANNEL H10/3 | CHANNEL H10/2 | CHANNEL H12 | CHANNEL H10 | CH. H10/1 | CHANNEL H7 | CH. H8 | CHANNEL H6 | CH. H6/1/1 | CH. H6/1 | CHANNEL Ba5 | CHANNEL Ba5/2 | CH. Ba5/3

LOT 44 LEVEE | LOT 66 LEVEE | LOT 60 LEVEE | LOT 65 LEVEE | LOT 62 LEVEE | LOT 61 LEVEE | LOT 76 | LOT 75 | LOT 74 LEVEE | LOT 73 LEVEE | LOT 71 LEVEE | LOT 55 LEVEE | LOT 55 & 56 LEVEE | LOT 41 DRAIN

DR. RB4/1 | DR. RB3/1/4 | DR. RB5/1 | DRAIN RB3/1/2 | DRAIN RB3/1 | DRAIN RB3/1/3 | DRAIN RB3/1/2A | DRAIN RB3/1/1/1 | DRAIN RB3/1/1

LEGEND

- Roads
- CSR Cane Railways

SunWater Infrastructure

- Earth and Lined Channels
- Pipeline Channels
- Earth Drains
- Embankments

MAP INFORMATION

Coordinate System (in blue): Geocentric Datum of Australia GDA94.
Projected Coordinate System (in black): Zone 55 Mapping Grid of Australia MGA94.

AERIAL PHOTOGRAPHY

Capture Date: June 2004 Scale: 1:25,000 Resolution: 300 DPI

BURDEKIN HAUGHTON WATER SUPPLY SCHEME

HAUGHTON SECTION LAYOUT

SCALE 1:50,000

0 250 500 1,000 1,500 2,000 2,500 m

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147 14'0"E 525000 | 147 16'0"E | 530000 | 147 18'0"E | 535000 | 147 20'0"E
20 10'0"S 7770000 | 20 12'0"S 7765000 | 20 14'0"S | 7760000 | 20 16'0"S | 7755000 | 20 18'0"S | 20 20'0"S

DR 4/2/1
SELLARS RD
CHANNEL 4
PENGALLY ROAD
CHANNEL 3
DRAIN 4
CHNL 3/1
DR 3/1
DR 3/2
CHNL 3/2
EIGHT MILE CREEK
CHANNEL 2
DRAIN 3
FOREMAN WALSH ROAD
DRAIN 6
CHNL 5
ROAD
DR 2/2
DRAIN 2
CHNL 1/3
BANNISTER ROAD
PARKINSON RD
DRAIN 2/1
DALBEG MAIN CHANNEL
CHNL 1/1
CHANNEL 1
STOCKYARD ROAD
DEL PRATT STREET
DALBEG PUMP STN B RISING MAIN
DALBEG PUMP STN A RISING MAIN
CHANNEL A
DR 5/1
DR 5
CHANNEL A3
TURKEY CREEK
AYR DALBEG ROAD
DOZER CREEK
STRATHALBYN ROAD
ROAD
BURDEKIN RIVER

LEGEND

- Roads
- CSR Cane Railways
- whitsunday

SunWater Infrastructure

- Earth and Lined Channels
- Pipeline Channels
- Earth Drains
- Embankments

MAP INFORMATION

Coordinate System (in blue): Geocentric Datum of Australia GDA94.
Projected Coordinate System (in black): Zone 55 Mapping Grid of Australia MGA94.

AERIAL PHOTOGRAPHY

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BURDEKIN HAUGHTON WATER SUPPLY SCHEME

DALBEG SECTION LAYOUT

1:50,000m

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DRAWING NO. A3-226278

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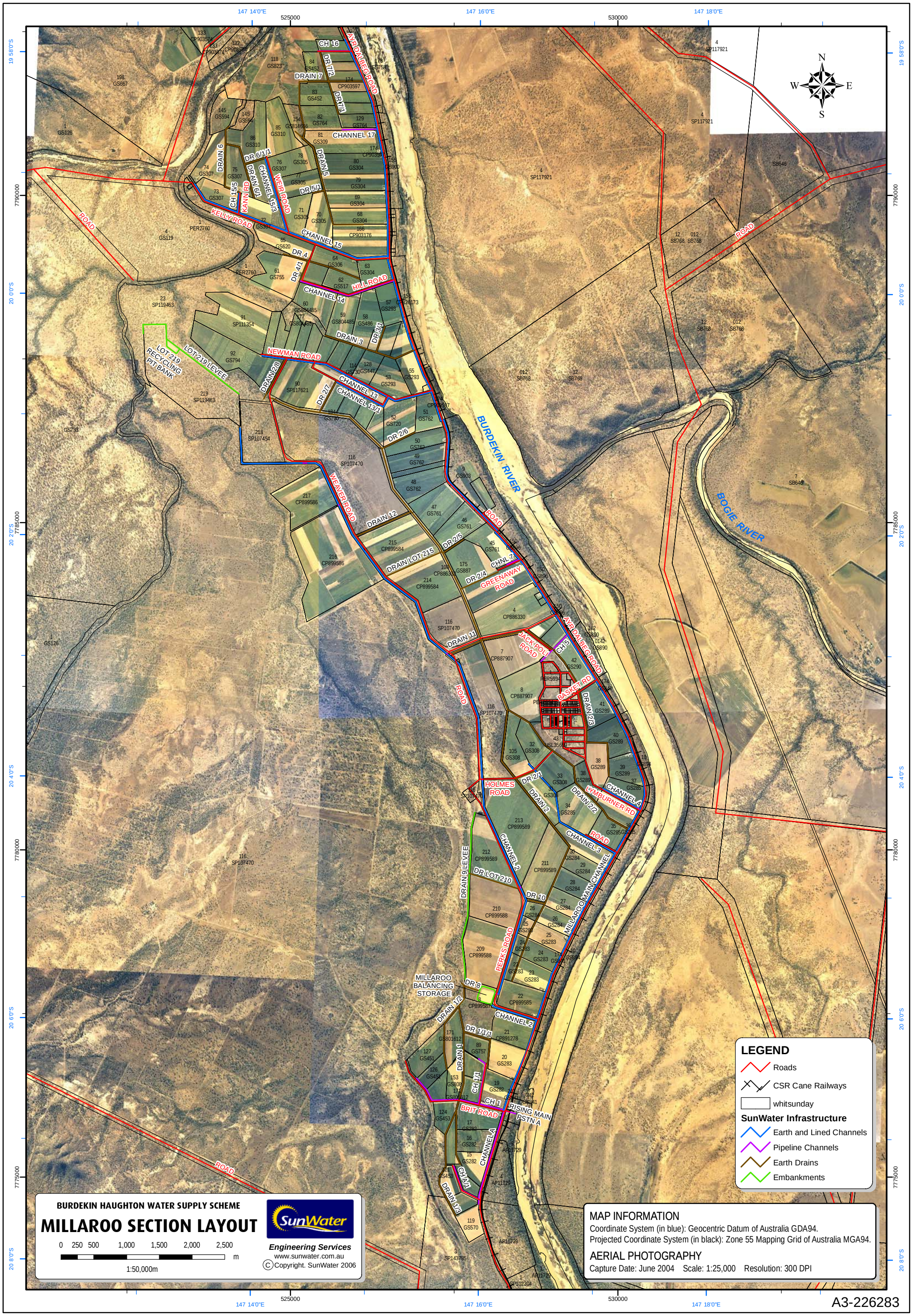

BURDEKIN HAUGHTON WATER SUPPLY SCHEME

MILLAROO SECTION LAYOUT

0 250 500 1,000 1,500 2,000 2,500 m

1:50,000m

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LEGEND

- Roads
- CSR Cane Railways
- whitsunday

SunWater Infrastructure

- Earth and Lined Channels
- Pipeline Channels
- Earth Drains
- Embankments

MAP INFORMATION

Coordinate System (in blue): Geocentric Datum of Australia GDA94.
Projected Coordinate System (in black): Zone 55 Mapping Grid of Australia MGA94.

AERIAL PHOTOGRAPHY

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MULGRAVE SECTION LAYOUT

BURDEKIN HAUGHTON WATER SUPPLY SCHEME

LEGEND

- Roads
- CSR Cane Railways

SunWater Infrastructure

- Earth and Lined Channels
- Pipeline Channels
- Earth Drains
- Embankments

0 250 500 1,000 1,500 2,000 2,500 m

1:50,000m

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NORTHCOTE SECTION LAYOUT

BURDEKIN HAUGHTON WATER SUPPLY SCHEME

SCALE 1:50,000

0 250 500 1,000 1,500 2,000 2,500 m

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MAP INFORMATION

Coordinate System (in blue): Geocentric Datum of Australia GDA94.
Projected Coordinate System (in black): Zone 55 Mapping Grid of Australia MGA94.

AERIAL PHOTOGRAPHY

Capture Date: June 2004 Scale: 1:25,000 Resolution: 300 DPI

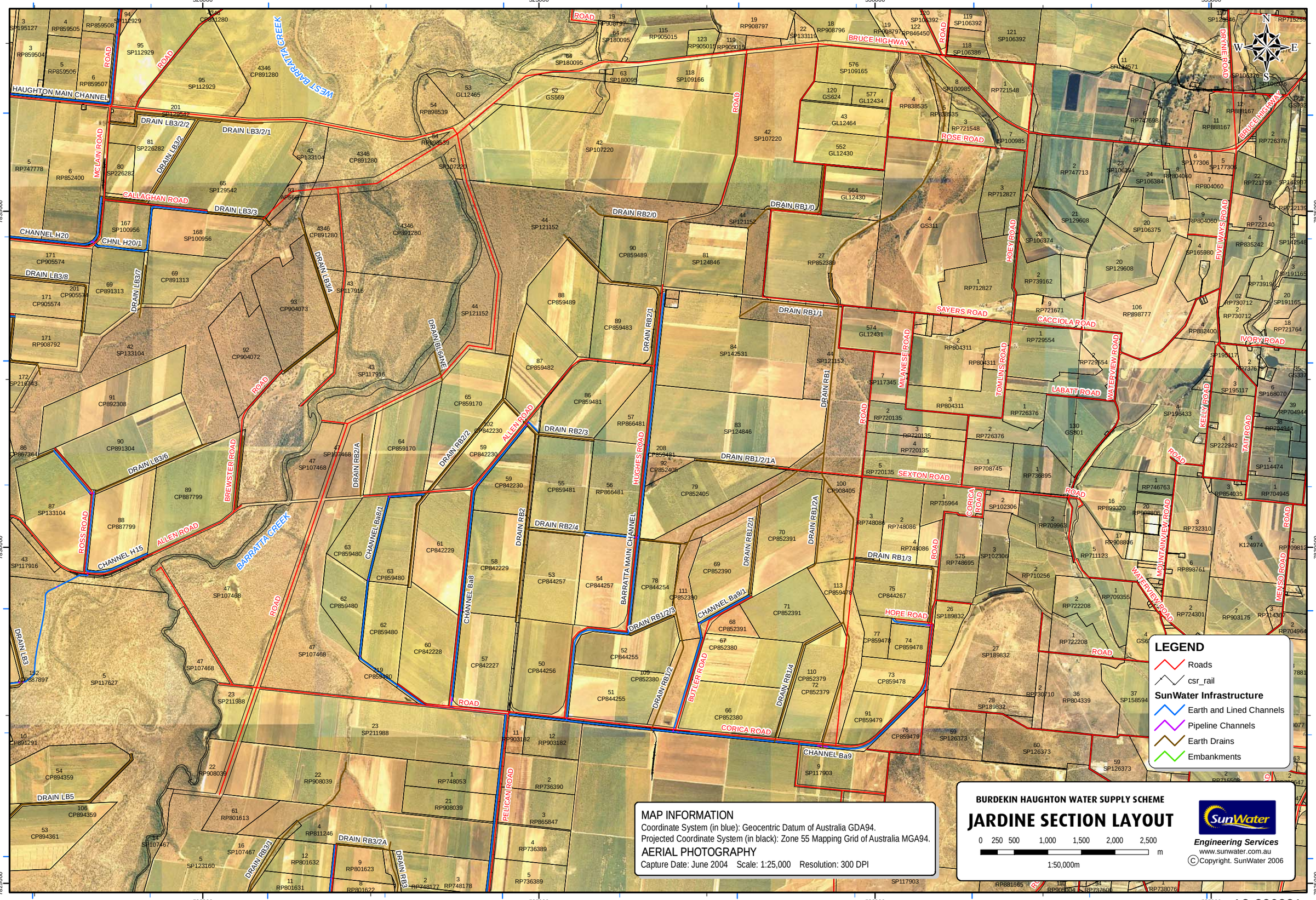
LEGEND

- Roads
- CSR Cane Railways

SunWater Infrastructure

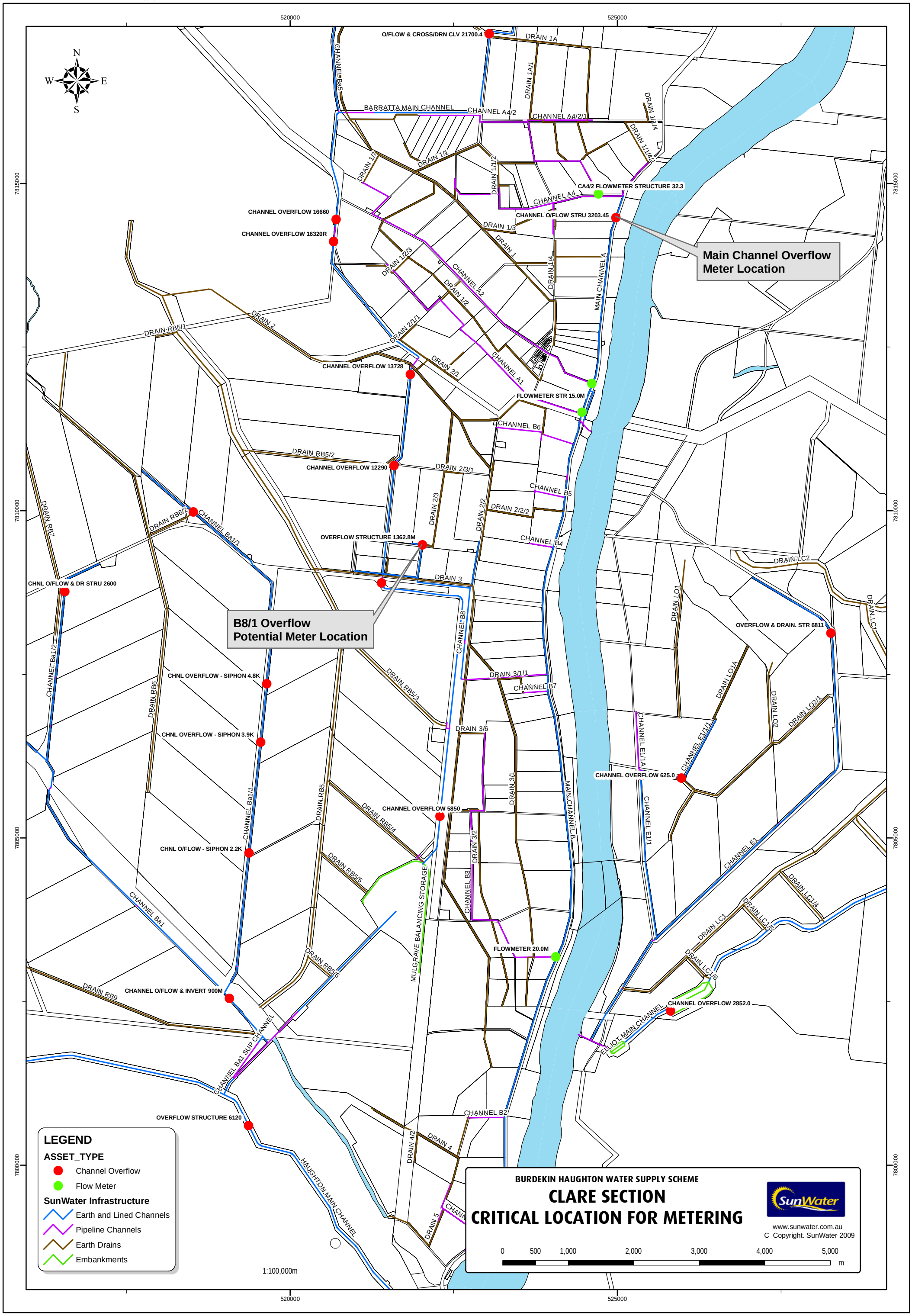
- Earth and Lined Channels
- Pipeline Channels
- Earth Drains
- Embankments

FN A3-226286



APPENDIX F

MAP OF CLARE METERING RECOMMENDATIONS



APPENDIX G

MAP OF BARRATTA AND HAUGHTON SECTIONS
END OF BAY LOCATIONS FOR FUTURE PONDAGE TESTS

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